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## Adults' Awareness Level And Perception of Family Planning in Selected Local Government Areas of Ekiti State, Nigeria

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### **Abstract**

*This study investigated adults' awareness level and perception of family planning among adults in selected Local Government Areas of Ekiti State, Nigeria. Specifically, the study sought the level of awareness and perception of adults on family planning. Descriptive research design of the survey type was adopted for this study. The target population for this study consisted of all adults in Ekiti State (Male and Female) while the sample consisted of 552 adults (Male and Female) using multistage sampling procedure. The instrument used to collect the data was a questionnaire titled Adults' Awareness and Perception of Family Planning (AAPFP). Face and content validity of the instrument was determined by experts in Social Studies, Tests, Measurement and Evaluation and Family Planning Unit. The reliability of the instrument was established using test-retest and a reliability coefficient of 0.85 was obtained and this was considered high enough to be reliable. Two research questions were raised for the study. The data generated were analysed using Percentages, Mean and Standard Deviation. The study found that the level of awareness of family planning among adults in Ekiti State, Nigeria was moderate. The study also showed that adults' perception of family planning varied based on the meaning, need, benefits, methods and side effects of family planning*

**Key Words:** Adults, Awareness, Perception, Family Planning, Population explosion.

### **Introduction**

Family planning can be described as a means by which couples and individuals ensure they do not raise more children than they could adequately take care of with available scarce resources to attain set goals. The aim can be effectively achieved when individuals and couples use family planning methods to time, in order to space and limit giving birth. This has made many to possibly see family planning as birth control method. Ajmera (2017) believed that family planning is synonymously used for birth control. Family planning has also been explained in terms of its objective and significance.

Armah-Ansah (2018) expressed that family planning is an essential strategy in promoting maternal and child health through

adequate spacing of birth and avoidance of unwanted pregnancies. The United Nations Population Fund (UNPFA, 2019) made it known that family planning is central to gender equality and women's empowerment. This means that family planning is tailored towards helping women to live a better life.

According to Argado (2017), family planning is one of the ways to control population. The World Health Organisation (WHO, 2018) also asserted that family planning is key to slowing unsustainable population growth. The assertion is plausible and upheld because when procreation is regulated, unsustainable population explosion could be checked. According to Rahman (2017), family planning is the voluntary limiting of human reproduction through the

means of different methods that could help to achieve it. Family planning involves the free decision of individuals to limit birth. Wikipedia (2018) explained that family planning may involve consideration of the number of children one wishes to have, as well as the age at which to have them, including the desire to have no children.

Raising a child requires a lot of resources like time and finance, family planning can help assure that those resources are available. Hence, it is expected that couples who wish to raise children come together to agree on how many they would like to raise and how to go about achieving the decision. Different methods of family planning which could help to achieve the desired number of children include both the natural and modern family planning methods. According to Ethiopian Federal Ministry of Health (FMOH, 2010), modern methods of family planning are generally classified into natural and artificial. The artificial could be named as contraceptives. According to Adeniran (2014), these include Sterilization, Spermicides, Condoms, Intrauterine Contraceptive Device (IUCD), Coitus Interruptus, Lactational Amenorrhea Methods (LAM), Cervical Mucus Method (CMM).

Family planning avails great benefits to both mothers, children, fathers and the society at large. Family planning enables mother to adequately breastfeed her child, gets more time for herself, the husband and participates in educational, economic and social activities. Adeniran (2014) posited that family planning is essentially for individuals, couples and families to improve their living standards, health and life expectancy. Olawande and Fasasi (2016) said contraceptive use reduces maternal mortality and improves women's health by preventing unwanted pregnancies and unsafe abortions. Family planning would also allow the mother to get more time to be physically, financially and emotionally fit for next pregnancy.

Hence, various agencies concerned have developed different means and programmes aimed at disseminating and promoting the idea of family planning in Nigeria. In order to make people know the importance embedded in modern and proper family planning, both national and international

organizations and agencies which include World Health Organization (WHO), United Nations Population Fund Activities (UNPFA), United States Agency for International Development (USAID) Society for Family Health (SFH), Federal and States Ministries of Health have organized series of educating programmes through different channels on family planning.

Furthermore, the World Health Organization (WHO), United States Agency for International Development (USAID), have made efforts to train health workforce in order to facilitate and educate people on family planning. The Federal and States Ministries of Health in Nigeria have also taken to nooks and crannies of Nigeria the campaign of family planning using mass media like radio, television, internet and other social and religious gatherings such as health centres and hospitals, churches, mosques. This might have made many to be aware of family planning in Ekiti State, Nigeria. The researchers are interested in finding the level of awareness among adults in Ekiti State. A study conducted by Ashimi, Amole, Ugwua and Ohonsi (2016) in Birnin Kudu, Jigawa State showed a high level of awareness of family planning among the respondents with 92% of them who have heard of family planning.

In a study carried out by Omolase, Faturoti and Omolase (2009), 89% amongst pregnant women presenting to antenatal clinic in Owo, Ondo State were aware of family planning. This can also be rated high. 80% of people in Ardo Kola Local Government Area of Taraba State were reported to have heard of family planning in a study carried out by Suntai and Oberiri (2016). It was gathered that 21.3% of the respondents heard through radio/television/newspapers, 45% heard through friends /relatives, 21.3% from books, 12.5% from health workers. The result of the study carried out by Olawande and Fasasi (2016) in Ado-Odo/Ota Local Government Area of Ogun State with 95.5% of respondents who indicated to have heard of family planning can also be seen as high. From the report, 44% heard through health workers, 22.9% from media, 20.3% from friends, 7.3% from people and 3.3% from religious centres. As far back year 1995, Obisesan, Adeyemo and Fakokunde (1998), reported that 94.3% of the respondents



in Ibadan were aware of the use of family planning. This also shows a high level of family planning awareness in Ibadan, Oyo State. Majority of respondents submitted to have heard of family planning through radio and health centres.

Despite the awareness creation on family planning, there are still observed cases of unregulated births among adults in some quarters. The unregulated child bearing seems to have a connection to adults' perception of family planning. Negative perception of family planning by adults could lead to low level of its engagement. Perception in this concept can be seen as the adults' opinions and judgement of family planning.

The opinion or understanding formed by individuals about a particular phenomenon could depend on the amount of information acquired. Perception appears to often affect people's behaviour or practice. The way individuals respond to issues can also be traced to their perceptions. This seems to have a link to the issue of family planning among adults. Hence, adults' perception of family planning could vary. There could be some adults who through their exposure and other factors have a positive opinion and belief of family planning and vice-versa. This could be said to manifest in Gulu district of Uganda where some adults in the communities perceived family planning as something with a lot of benefits ranging from social, financial and health wise while adults who had experienced child deaths saw family planning as a bad thing. The adults in this category claimed they could not raise children to replace those died during war due to family planning engagement (Orach, Otim, Aporomon, Amone, Okello, Odongkara and Komakech, 2015).

It has also been revealed that many adults ascribe some health related problems with family planning. Some adults believe family planning poses health treats to individuals who adopt the use of contraceptives. Many see family planning as undue consumption of chemical and that it causes injuries and damages to reproductive organs. Abdulrazaq, Kabir, Mohammed and Suleiman (2014) noted that many married people believe family planning methods could lead to infertility or delay in child bearing when a woman is eventually ready for

conception. More so, some believe family planning can cause loss of trust between couples (Argado, 2017) It was noted that many adults believed that family planning methods cause protruding stomach thereby making anyone who practises it to become fat unnecessarily.

In addition, it is noticed in some culture that many women see family planning as what negates the essence of marriage, claiming that bearing and raising of children open way to respect and dignity in the society. Adeniran (2014) stated that the people's desire to have many children irrespective of income or economic status was due to positive value Nigerians attach to marriages, family life and procreation which considerably reduces motivation for contraception. However, there is need to know the level of awareness and the perception of family planning among adults in Ekiti State.

#### **Statement of the problem**

It has been observed in some quarters that many adults in Ekiti State despite enlightenment campaign on family planning would not score family planning engagement as worthwhile. Many adults as expected are noted to hold different perception on family planning in Ekiti State. Negative perception of family planning could lead to low level of its engagement and possibly affect the society. Eventually lack of family planning could lead to overpopulation, unsafe abortion, health related problems to mother and child, lack of social and economic freedom to couples. Since every member of the society emanated from one family or the other, the qualities and problems of the society today seem to be the wider interpretation of what is inherited from various families. The researchers also observed that lack of proper family planning appears to have resulted in problems such as low standard of living, street hawking, unemployment, hunger, divorce and child abuse.

Government and Non-Governmental agencies have over time been organizing series of programmes to enlighten the citizens on the need for family planning in Nigeria. Despite the efforts, it appears that the people are still sceptical and indecisive about the practice. It is observed that if adults in Ekiti State continue to have negative perception towards family planning, the problems of unwanted

pregnancies, unsustainable population increase, unemployment, Sexually Transmitted Diseases (STDs), child abandonment, child abuse and abortions may continue to rise.

**Purpose and Objectives of the Study**

The purpose of this study was to find out the level of awareness of family planning among adults in Ekiti State. The study also aimed at finding out adults’ perception of family planning in Ekiti State. The objectives of this study are to - reduce problems of unwanted pregnancies, Sexually Transmitted Diseases (STDs), child abuse and divorce among couples. - boost standard of living, eradicate hunger and increase employment rate in the society. -combat population explosion and reduce poverty drastically among the citizens.

**Research Questions**

The following research questions were raised for the study:

1. What is the level of awareness of family planning among the adults of Ekiti State?
2. What is the perception of family planning among the adults of Ekiti State?

**Methodology**

Descriptive research design of the survey type was adopted for the study. The study adopted descriptive method because sample was used to describe current situation as it exists without any manipulation. The population for the study comprised all adults in selected Local Government Areas of Ekiti State, Nigeria while the sample consisted of 552 adults. Multistage sampling procedure was used to select the sample. Simple random technique was adopted to select six Local Government Areas out of sixteen (16) in Ekiti State. Simple random sampling technique was also adopted to select three towns (rural and urban) from each of the selected Local Government Areas. The instrument used was a questionnaire designed by the researchers titled Adults’ Awareness Level and Perception of Family Planning

Questionnaire (AALPFPQ). The validity of the instrument was determined through face and content validity procedures by experts in Social Studies, Tests, Measurement and Evaluation. The reliability of the instrument was established through test re-test method and the reliability coefficient of 0.85 was obtained. The data collected were analysed using Mean, Standard Deviation and Percentages statistical tools.

**Results**

Question 1: What is the level of awareness of family planning among adults in Ekiti State?

In answering the question, scores on adults’ awareness of family planning in Ekiti State, Nigeria were used. Mean score, standard deviation, frequency counts and percentage were used to illustrate the responses in items 1-5 in section B of the ‘AAPFPQ’. To determine the level of awareness of family planning among the adults in Ekiti State (low, moderate and high), the mean score and standard deviation were used.

The low level of awareness of family planning among the adults in Ekiti State was determined by subtracting the standard deviation score from the mean score ( $15.91 - 3.270 = 12.64$ ). The moderate level of awareness of family planning among the adults was determined by the mean scores (15.91) while the high level of awareness of family planning among the adults was determined by adding the means score and the standard deviation score ( $15.91 + 3.270 = 19.18$ ). Therefore, the low level of awareness of family planning among adults in Ekiti State starts from 5 to 12.64, the moderate level of awareness of family planning among the adults starts from 12.65 to 19.17 and the high level of awareness of family planning among adults in Ekiti State awareness of family planning among adults in Ekiti State is from 19.18 to 20. The level of awareness of family planning among adults in Ekiti State, Nigeria is presented in table below.

**Table 1:** Level of Awareness of Family Planning among Adults in Ekiti State, Nigeria

Level of Awareness of Family Planning	Frequency	Percentage (%)
Low (5-12.64)	64	11.59
Moderate (12.65-19.17)	422	76.45
High (19.18-20)	66	11.96
Total	552	100

Table 1 presents the level of awareness of family planning among adults in Ekiti State. The result shows that out of 552 respondents sampled, 64 representing 11.59% had low level. Those who had moderate level were 422

representing 76.45% while those with high level were 66 representing 11.96%. This showed that the level of awareness of family planning among adults in Ekiti State, Nigeria was moderate.

**Table 2: Means Response of the Perception of Family Planning among Adults in Ekiti State**

Perception of Family Planning among Adults in Ekiti State	Responses		Mean	S.D	Remarks
	Agree	Disagree			
<b>2a. Issues Relating to Meaning of Family</b>					
• Family planning means ensuring planned conception	450	102	1.82	.388	Positive
• Family planning is way of attaining number of children one can adequately cater for	448	104	1.81	.391	Positive
• Family planning is limiting of child bearing for economic reasons	440	112	1.80	.403	Positive
• Family planning means ability to determine number of children in a family	443	109	1.80	.398	Positive
• Family planning is for spacing of children	434	118	1.61	.489	Positive
• Family planning means timing of birth	432	120	1.60	.490	Positive
<b>2b. Issues Relating to Need for Family Planning</b>					
• In order to reduce the problem of unwanted pregnancy, there is need for family planning	460	92	1.83	.373	Positive
• There is need for family planning in order to prevent unsustainable population growth	430	122	1.78	.415	Positive
• There is need for family planning because of economic demand for raising children	428	124	1.77	.419	Positive
• There is need for family planning in order to have easy control over children	408	144	1.74	.440	Positive
• There is need for family planning in order to improve couple's health	404	148	1.73	.443	Positive
• Family planning is important to ensure improved social freedom for women	372	180	1.67	.469	Positive
<b>2c. Issues Relating to Benefits of Family Planning</b>					
• Family planning help to reduce the number of unsafe abortions	452	100	1.82	.385	Positive
• Family planning could enhance better standard of living	424	128	1.77	.424	Positive
• Good parenthood could be enhanced through family planning	410	142	1.74	.438	Positive
• Family planning helps to reduce maternal mortality rate	398	154	1.72	.449	Positive
• Family planning can reduce infant mortality (death) rate	384	168	1.70	.461	Positive
• Family planning helps in the treatment of involuntary infertility	362	190	1.66	.476	Positive



Perception of Family Planning among Adults in Ekiti State	Responses		Mean	S.D	Remarks
	Agree	Disagree			
<b>2d. Issues Relating to Methods of Family Planning</b>					
• The use of condom can enhance family planning	400	152	1.72	.447	Positive
• Voluntary surgical (male and female) method enhanced family planning	364	188	1.70	.461	Positive
• Intrauterine device (copper-T) is a good method of family planning	376	176	1.68	.466	Positive
• Through the use of contraceptive pills, family planning can be achieved	384	168	1.66	.474	Positive
• Calendar/rhythm method of family planning can be used to control birth	364	188	1.66	.474	Positive
• Longer breastfeeding can prevent pregnancy in a short term	310	242	1.56	.497	Positive
<b>2e. Issues Relating to Side Effects of Family Planning</b>					
• Family planning cannot cause severe bleeding	317	235	1.57	.495	Positive
• Family planning cannot cause delay in child birth processes	308	244	1.56	.497	Positive
• Family planning methods cannot cause headache	309	243	1.56	.497	Positive
• Indiscriminate sexual behaviour is not encouraged through family planning	300	252	1.54	.499	Positive
• The use of family planning methods cannot lead to infertility	294	258	1.53	.499	Positive
• Family planning cannot make stomach to protrude	284	268	1.51	.500	Positive

**Mean Cut-off = 1.50**

Table 2 with 30 items shows the perception of the adults. Using Mean Score of 1.50 as the cut-off point, perception of respondents with mean score at the cut-off point and above indicating positive perception of respondents while the mean scores below the cut-off point will be categorised as negative perception in terms of meaning, need, benefits, methods and side effects of family planning.

In table 2a, the respondents agreed that family planning means ensuring planned conception (mean = 1.82) and way of attaining number of children one can adequately cater for (mean = 1.81). In table 2b, the respondents perceived the need for family planning as reducing the problem of unwanted pregnancy (mean= 1.83) and to prevent unsustainable population growth (mean =1.78). In table 2c, the benefits for family planning were perceived to be reducing the number of unsafe abortions

(mean =1.82) and to enhance better standard of living (1.77). Table 2d also reported the use of condom (1.72) and voluntary surgical (male and female) method was perceived to enhance family planning (1.70). In table 2e, the respondents further perceived that family planning cannot cause severe bleeding (mean = 1.57) and delay in child birth processes in terms of side effects (mean = 1.56). Therefore, it can be concluded that adults in Ekiti State had positive perception of family planting in relation to meaning, need, benefits, methods and side effects.

**Discussion**

The findings from the study revealed that the level of awareness of family planning among adults in Ekiti State was moderate. The reason for moderate awareness of family planning among the adults in Ekiti state might not be

unconnected with the technology advancement by information diffusion increases at a very high speed. The result is in align with Ashimi, Amole, Ugwua and Ohonsi (2016) as well as Suntai and Oberiri (2016) who found high level of awareness of family planning in Jigawa and Taraba state respectively. In both instances, it was gathered that many got access to information on family planning through health workers, media, friends, and religious centres.

It was also indicated from the findings that adults in Ekiti State have positive perception of the meaning, needs, benefits, methods and side effects of family planning. The adults perceived the meaning of family planning to be appropriate, that there is need for family planning because of the tremendous benefits for the couples and the society at large. They also perceived that family planning has no dangerous side effects. The study is in support of Orach, Otim, Aporomon, Amone, Okello, Odongkara and Kamakech (2015) who found out that respondents in Gulu, northern Uganda viewed family planning as beneficial and acceptable.

The study also support that of Aniwada, James, Uchena, Ekuma and Kelechi (2017) who gave a report that 77.9% of the respondents in an urban slum in Enugu State, Nigeria believed family planning prevents sexually transmitted diseases (STDs), 55.2% believed family planning helps one to have the desired number of children and 71.5% perceived family planning helps one to have more time for other things.

The study is against that of Abdulrazaq, Kabir, Mohammed and Suleiman (2014) posited that many married people believed family planning methods could lead to infertility or delay in child bearing when a woman is eventually ready for conception. More so, Argado (2017) in his findings found that some people believed that family planning can cause loss of trust between couples.

## Conclusion

Based on the findings from the study it is concluded that majority of the adults in Ekiti state are aware of family planning. It was also noted that adults' perception of family planning in Ekiti State was positive.

## Recommendations

Based on the findings of the study the following recommendations were made:

1. More awareness on family planning should be created by both government and non-governmental organisations to increase the level of awareness among adults in Ekiti State, Nigeria.
2. Adults who have positive perception of family planning should be encouraged through various outreach campaign to sustain the perception.
3. Adults with negative perception on family planning should have a change of thought and embrace it.

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## Influence of Electronic Media on High School Students' Learning Outcomes in Biology

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### Abstract

*This study examined the influence of electronic media on high school student's learning outcomes in Biology in Ilesa West Local Government Area of Osun State. Three hundred and fifty (350) respondents were randomly selected from ten (10) high schools. A self-developed questionnaire was validated by four (4) experts in the department. The reliability of the instrument was tested using a test-retest method. The collected data were analyzed using mean, standard deviation and Pearson product moment co-efficient of correlation( $r$ ) and  $t$ -test analysis. The major conclusions of this study was that electronic media helps to improve students learning outcomes, helps to broaden the practical skills of students' in Biology, helps students to learn at their own pace and makes learning more appealing to students and also radio, internet, mobile phone, television, and computers are indicated to be available in the school. Based on the finding, the following recommendations were made that School administrators need to be aware of the various types of media that influence secondary school students' behaviour and establish good guidelines on how these electronic media should be used by the students within the school compound.*

**Keywords:** *Electronic media, Internet, Television, Biology, Radio, Computer, Learning Outcomes, Practical Skills.*

### Introduction

According to James<sup>5</sup> (2009), the history of electronic media starts with the invention of radio by Marconi. The first radio station was set up in Pittsburg, New York and Chicago in the 1920s. Following the USA, European countries also started radio stations for broadcasting news and entertainment content. The colonial powers like Britain and France set up radio stations in Asian and African countries in the early years of 20<sup>th</sup> century. The next step in electronic communication media history was the invention of cinema. Following cinema, television broadcasting was initiated in the US on experimental basis during 1920s. But, the dramatic impact of television as a mass medium began in 1950s. Parallel to these, recording industry also boomed in the western

countries. In short, the term electronic media mainly includes: radio, television, audio and video records, Internet etc.

Berkon (2013) stated that "Electronic Media" can be define as those communication means based on electronic or electro-mechanical means of production and most often distinguished from print media. The main electronic sources used by general public normally include radio, television, sound recordings, video recordings and internet. It indicates the primary means of communicating with large group of people. There are four basic functions of electronic media which generally include to inform, entertain, educate and the most important to influence public opinion. The teaching of Biology in Nigerian high schools needs to be properly handled. The material used by teachers to teach and



drive home their lesson points is an important issue in classroom interaction and successful transfer of knowledge from the teachers to the learners. Electronic media are materials which assist teacher to make their lesson explicit to learner. This includes radio, video, television, computers among others. These media serve as supplement to the normal processes of instruction (Ijadunola, 2009).

Biology deals with the study of living things and how they relate with each other and with their environment. The knowledge of Biology, if well applied, can improve the welfare of humans (Maundu, 2008). This is because of the uses of Biology that make countries include it in their curriculum. This is because a curriculum is supposed to enable learners to acquire and develop the desired knowledge, skills and attitudes (Oluoch, 2012). In Nigeria, the inclusion of Biology in the secondary school curriculum is aimed at enabling the learner to understand and deal with the problems of themselves, the environment, and the future.

The electronic media mainly consists of radio, television, and movies and are actually classrooms without four walls. (Hustonet, 2012). Media is an important source of shared images and messages relating to political and social context. Technology of media is an important part of student's lives in the twenty-first century and play very important role in creating awareness related various aspects of life and personality as found by Mehmood (2010).

### **Introduction**

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Academic Performance is the outcome of students' evaluation in the educational process indicating to what level the students

have achieved the educational goals as specified in the curriculum which is greatly influenced by internal and external classroom factors. buttresses the above concepts by putting forward that academic performance is commonly measured by evaluation (examination) and continuous assessment but there is no general agreement on how it can best be captured. It emphasized among other factors that human resources have great influence on academic achievement of the student. In a related study, Mellisa (2016) emphasized that academic performance indicates how well a student meets standard set out by the institution. A student success is measured by academic performance. Scott (2015) generally refers academic performance to how well a student is accomplishing his or her tasks and studies. The study emphasizes that Grades is the most well-known indicator of academic performance, grades are student's "scores" for their overall tenure. Grades are often the average of assignment, continuous assessment and semester terminal evaluation that are often affected by student psychological status, attendance, education environment etc.

Ricarda (2014) documented that academic achievement represents performance outcomes that indicates the extent to which a person has accomplished specific goals that were the focus of activities in instructional environments, specifically in school, college and university. The study conceptualized academic achievement to be a multi-faceted construct that comprises various domain of learning, because of this wide-ranging of academic achievement and the fact that it covers a broad variety of educational outcomes hence its definition depends on the indication used to measure it.

Further, the success of an education system depends greatly on the effectiveness of its media, which play an important role in eliciting knowledge. The choice of medium is crucial in education selecting the appropriate and effective media is a formidable task. No medium is perfect and useful under all circumstances. Each medium broadens the range and effectiveness of education. With the advent of rapid developments in electronic media, a broad range of media is

available for different educational processes. In the process of imparting education, many teaching aids/tools such as Audio – video materials, computer aided learning, computer based training, interactive computer video disc, multimedia, etc., are being used to supplement the traditional teaching. Therefore, this study aims to investigate the impact of electronic media on high school students' academic performance in Biology.

### **Statement of the Problem**

The act of teaching is fundamentally concerned with passing ideas, skills and attitude from the teacher to the learner. In Nigeria for example, experience has shown that spoken words alone in the communication of ideas are grossly ineffective and inefficient in producing desired learning outcomes. Every year, when the results of public examination are released, there has always been mass failure in Biology. The reason for this could be ascribed to the fact that there are topics in Biology that pose serious problem of comprehension to students. These topics cannot be taught effectively without the use of electronic media to make the learning practicable. The issue that needs scholastic attention therefore bothers on how well the use of electronic media really influence student's academic performance in Biology; and whether students learning can be enhanced significantly with the aid of electronic media. Finding appropriate answers to these questions and many more constitute the ultimate concerns of this study.

### **Purpose of the Study**

The specific objectives (purpose) of the study are:

1. To investigate the influence of electronic media on high school students' learning outcomes in Biology
2. To find out the type of electronic media mostly used in the teaching of Biology high schools.
3. To examine the gender difference in the influence of electronic media on high school students' learning outcome in Biology.

### Research Questions

The following questions will be addressed in the course of this study:

1. What is the influence of electronic media on high school students' learning outcome in Biology?
2. What types of electronic media are mostly used in the teaching of Biology in high schools?

### Research Hypothesis

1. There is no significant difference in the influence of electronic media on high school male and female students' learning outcome in Biology.

### Methodology

#### Research Design

This study adopted the descriptive survey research design.

#### Population of the Study

The population for the study consists of all students offering Biology in high schools in Ilesa west local government area of Osun state.

#### Sample and Sampling Techniques

With the use of simple random sampling method, thirty-five (35) senior high school Biology students were randomly selected from ten (10) secondary schools in Ilesa West Local Government Area of Osun. Therefore, in all, three hundred and fifty (350) respondents constitute the sample for the study.

#### Research Instrument

The instrument used for the research was a self-constructed questionnaire and a check-list. Section A of the questionnaire was used to collect demographic data information such as name of the school, respondent's sex and age. Section B consist of items that elicit responses on the focus of the study from the students. The Questionnaire was based on 5-point likert scale of strongly Agree (SA), Agree (A), Undecided (U), Disagree (D), and Strongly Disagree (SD) while checklist was based on Used and Not Used.

### Validity and Reliability of the Instrument

These instruments were validated by experts who are Biology lecturers in the faculty of education in Osun state University and Osun state College of Education, Ilesa in Osun state. They worked on the items for the purpose of suitability regarding content validity. The instruments were validated by experts who are Biology lecturers in the faculty of education. They worked on the items for the purpose of suitability regarding content validity are given lecturers in the faculty for the input and establishing content validity. For reliability, the test-retest method was adopted. The questionnaire was administered on students within the space of two weeks interval. A reliability coefficient of 0.740 was obtained for the questionnaire, while the check-list had a reliability value of 0.841. Since these reliability coefficients were high above 0.5, then the test instruments were adjudged good for the purpose for which they were constructed.

### Procedure for Data Collection

The researchers administered the instruments to the respondents at each high school in Ilesa west local government area of Osun state. 300 copies of the Inventory were administered and was personally retrieved by the researchers.

#### Method of Data Analysis

The collected data were analyzed by using Mean, Standard Deviation and Pearson product movement co-efficient of correlation ( $r$ ).

### Results and Discussions

#### Demographic Information

The data collected and analysed in this section represents the variables of focus for the study and background information of high school students that were actively involved in the study. The demographic information in which data were collected and analysed includes academic class, gender, and age group which are presented on tables as follows:



**Table 1: Distribution of Students According to Gender, Academic Level, and Age Group**

Academic Level	Frequency	Percentage (%)
S S 1	139	39.7
S S 2	110	31.4
S S 3	101	28.9
Total	350	100
Gender	Frequency	Percentage (%)
Male	163	46.6
Female	187	53.4
Total	350	100
Age Group	Frequency	Percentage (%)
10 – 14 Yrs.	97	27.7
15 – 20 Yrs.	239	68.3
21 and Above	14	4
Total	350	100

Table 1 indicates the distribution of students that participated in the study. The table revealed that more students in S.S.1 participated in the study than those in higher classes (39.7%>31.4%>28.9%); female students were more than male students (53.4%>46.6%); and more students in the age group of 15 to 21 yrs were in the study than those lesser in age or higher in age (68.3%).

This implies that majority of the students were not new to secondary education, they were females, and matured, thus, majority of the students are capable to respond to the instrument.

**Research Question One:** What is the influence of electronic media on high school students' learning outcome in Biology?

**Table 2: Mean and Rank Order of Influence of Electronic Media on High School Students' Learning Outcome in Biology**

S/N	Electronic Media helps:	Mean	Rank Order
1.	Students to learn Biology concept quickly	3.32	12 <sup>th</sup>
2.	Student to understand more abstract ideas of Biology	3.02	15 <sup>th</sup>
3.	To broaden the practical skills of students in Biology	4.21	1 <sup>st</sup>
4.	To make the Biology class interesting to students	3.72	8 <sup>th</sup>
5.	To make learning more appealing to students	3.89	5 <sup>th</sup>
6.	To increase students' knowledge in Biology	3.55	9 <sup>th</sup>
7.	To improve students' learning outcomes	3.99	3 <sup>rd</sup>
8.	Student to remember and retain what have been taught in Biology	3.42	11 <sup>th</sup>
9.	To sustain students' attention in class lesson	3.09	14 <sup>th</sup>
10.	To stimulate students learning	3.88	7 <sup>th</sup>
11.	To complement teachers' verbal explanation	4.03	2 <sup>nd</sup>
12.	Students to learn how to draw at their own pace	3.22	13 <sup>th</sup>
13.	Students to learn at their own pace	3.92	4 <sup>th</sup>
14.	To make students learning easier and simpler	3.89	5 <sup>th</sup>
15.	Students to progress with their study	3.43	10 <sup>th</sup>
	Grand Mean		3.64

Table 2 shows the mean and rank order of influence of electronic media on high school students' learning outcome in Biology. Based on the decision scale of an 5-Point Likert scale of 3.0 benchmark, the highest ranking mean (4.21) of Item 3 indicated that students agreed

that electronic media helps to broaden the practical skills of students in Biology; Item 11 with the mean of 4.03 revealed that students claimed that the electronic media complement teachers' verbal explanation; the 3<sup>rd</sup> ranking mean of 3.99 indicated that students generally



posited that electronic media helps to improve students’ learning outcomes; the 4<sup>th</sup> ranking mean of 3.92 revealed that electronic media helps to students to learn at their own pace; and the 5<sup>th</sup> ranking mean shows that electronic media makes learning more appealing to students and students learn easier and simpler with electronic media (3.89).

Other positive characteristics of electronic media as indicated by high school students include: stimulate students learning; make Biology class interesting to students; increase students’ knowledge in Biology; helps students to progress with their study;

helps students to remember and retain what have been taught in Biology; helps students to learn Biology concept quickly; students to learn how to draw at their own pace; helps students to sustain attention in class lesson; and helps students to understand more abstract ideas of Biology. Cumulatively, the grand mean of 3.64>3.00 indicated that electronic media has a positive influence on high school students’ learning outcome in Biology.

**Research Question Two:** What types of electronic media are mostly used in the teaching of Biology?

**Table 3: Percentage and Frequency of Electronic Media Usage in Teaching Biology**

S/N	Electronic Media	Available Freq. (%)	Not Available Freq. (%)	Used Freq. (%)	Not Used Freq. (%)
1.	Computer	237 (67.7)	113 (32.3)	188 (79.3)	49 (20.7)
2.	Television?	304 (86.9)	46 (13.1)	244 (80.3)	60 (19.7)
3.	Radio?	311 (88.9)	39 (11.1)	210 (67.5)	101 (32.5)
4.	Projector	162 (36.3)	188 (53.7)	99 (61.1)	63 (38.9)
5.	Internet	306 (87.4)	44 (12.6)	287 (93.9)	19 (6.1)
6.	Mobile Phone	302 (86.3)	48 (13.7)	249 (82.5)	53 (17.5)
7.	iPod?	121 (34.6)	229 (65.4)	104 (86.0)	17 (14.0)
8.	iPad/Tablet?	92 (26.3)	258 (73.7)	73 (79.3)	19 (20.7)
9.	Laptop?	61 (17.4)	289 (82.6)	43 (70.5)	18 (29.5)
10.	Electronic board?	32 (10.0)	318 (90.0)	22 (68.8)	10 (31.2)

Table 3 indicates the percentage and frequency of type of electronic media that are available and mostly used in the teaching of Biology. Significantly, students claimed that electronic media such as radio, Internet, mobile phone, television, and computers are indicated to be available. While, electronic media such as Internet, mobile phone,

television, and computer are the mostly used electronic media in teaching Biology.

**Hypothesis Testing**

**Research Hypothesis One:** There is no significant difference in the influence of electronic media on high school male and female students’ learning outcome in Biology

**Table 4:t-test Analysis of Gender Difference in the Influence of Electronic Media on High School Students’ Learning Outcome in Biology**

Gender	N	X	SD	df	T	Sig. (2-tailed)	Remark
Male	163	3.27	.51	348	.47	.64	Accepted
Female	187	3.22	.54				

From Table 4, it can be deduced that there was no significant difference in the influence of electronic media on high school male and female students’ learning outcome in Biology. This is reflected in the findings of the hypotheses tested df (348), t= .47, p>0.05.

Thus, the hypothesis which states that “there is no significant difference in the influence of electronic media on high school male and female students’ learning outcome in Biology” is accepted.

## Discussions, Conclusions and Recommendations.

### Discussion of Findings

The result of this study is well documented on the influence of electronic media on high school students' learning outcome in Biology. Based on the findings, majority of the students agreed that electronic media helps to broaden the practical skills of students in Biology, helps to improve students' learning outcomes, helps to students to learn at their own pace and makes learning more appealing to students. The majority of the students agree that electronic media stimulate students learning, make Biology class interesting to students, increase students' knowledge in Biology, helps students to progress with their study, helps students to remember and retain what have been taught in Biology and helps students to learn Biology concept quickly. The finding is in agreement with Igere (2014), which reveals that over the years, the electronic media has been a very important instrument for facilitating academic activities of the students.

Another finding of the study revealed the type of electronic media that are available and mostly used in the teaching of Biology. Students claimed that electronic media such as radio, internet, mobile phone, television, and computers are indicated to be available while, electronic media such as internet, mobile phone, television, and computer are the mostly used electronic media in teaching Biology. The finding is not in tandem with Huston (2009) who posited that computers, telephones, and internet are not commonly used in the classroom.

Furthermore, the finding of the result revealed that there was no significant difference in the influence of electronic media on high school male and female students' learning outcome in Biology. The finding was corroborated by Gao (2013), students are more reliant on the electronic media to access information about assignments and school life as well as entertainment.

### Conclusions

From this study it was concluded that there was electronic media saturation within the students' environment. These appeared in

different types such as televisions, telephone, computers, radios, DVDs, cassettes/ CDs, MP3s and record players. Most of these types of media were accessed by the students from schools while others were accessed from the homes. The society seems to be ignorant about the harm that can be caused by electronic media to the students. This is because it is the same society that had enabled these different types of electronic media to be available to the students not considering their age. Different content was accessed by the students from the electronic media this ranged from movies, video games, and music and news bulletin. Some of the content seemed to affect the student's behaviour negatively. This is why some negative behaviours have persisted in students especially bad sexual and violent behaviours. However, some content affected the students positively by informing them, extending their social field and enabling them to use their leisure time wisely and they are used to enhance learning in the classroom.

Research finding support the fact that electronic media is a powerful agent of socialization, it can educate and aware the masses and it can help students in their studies better than any other source. It is found in this research finding that if on one side electronic media help students for solving their academic problems, help in learning new ways of education and if it is beneficial for students in their curricular activities on other hand it also negatively affect their academic performance, lead most of the students to delinquency, smoking behaviour are its obvious result. Its negative consequences can be observed in form of physiological and psychological problems.

Base on the findings of the study, it was recommendations that:

1. School administrators need to be aware of the various types of media that influence secondary school students' behaviour and establish good guidelines on how these electronic media should be used by the students within the school compound.
2. The Ministry of Education should encourage media literacy programmes on all types of media accessed by the students as part of school curricula, youth

and community organizations and family life.

3. The government should encourage the media to promote presentations of health information through educational programmes, essential life skills and environmental programmes. This will reduce dangers of drug abuse, premarital sex and aggressive behaviours and promote students' health and well-being.
4. School principals and teachers in general should be aware of how behaviour is highly influenced by electronic media so as to be able to handle behaviour issues especially bad sexual behaviours and violence among students.
5. There should be a policy towards censoring information before it is broadcast over any form of media. This should touch content on music, movies, advertisements, social networks and internet. This will allow broadcasting of useful and not misleading information especially to the students.

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# Academic Staff Ethical Orientation and Professional Conduct in Public Universities in Lagos and Ogun States, Nigeria

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## Abstract

*The academic staff are important resource in the educative process in any university, and the extent of display of morality in the discharge of their responsibilities is crucial to the attainment of the integrity of the system. Therefore, the study examined the association between academic staff ethical orientation and professional conduct in public universities in Lagos and Ogun States, Nigeria. Based on the purpose of the study, two hypotheses were formulated and tested at 0.05 level of significance. A descriptive survey research design carried out ex-post-facto was used for the study. The population comprised all academic staff in all the five public universities (two federal and three states) in the two states. The sample size was 225 academic staff drawn from three universities (one federal and two states) using disproportionate and random sampling techniques. A researcher-designed, validated and reliable ( $r = 0.84$ ) 20 item questionnaire was used for data collection. Data obtained was analysed using Pearson's Chi-square statistical tool for hypotheses testing, the results of the analysis showed that there was a significant correlation between the cultural orientation of academic staff and professional conducts. The study further showed a significant association between academic staff personal idiosyncrasies and professionalism among academic staff in task performance. It was suggested that awareness should be continuously created in academic staff to subordinate their cultural background and personal mannerism to the general interest as far as their professional conducts are concerned.*

**Keywords:** Academic staff, ethical orientation, professional conducts, public universities.

## Introduction

Universities are educational institutions established to produce high level manpower who are expected to contribute to the development of their country. Specifically, the mission and vision of any university are usually contained in the enabling laws establishing it and the National Policy on Education (FRN 2014) which clearly spells out the goals of university education in the country. For effective management of universities, there is the need for adequate staffing, which has to do with the putting the right peg in the right hole by ensuring that the right people are recruited to do the right thing at a particular time.

The academic staff are employees of any university who are specialists in various fields of study and are involved in teaching, research and community service towards the

attainment of the goals, mission and vision of their universities. As professionals, they are expected to be guided by certain ethics in the discharge of their responsibilities. Ethical practice among the faculty of any university is an important factor in the realization of the goals. This is because of its importance in instilling norms and moulding the behavior and character and bringing about the integrity of the university system. Every university in the country has codes of conducts which guide the behavioral patterns of its employees, usually packaged in a booklet/Manual and made available to employees on assumption of duty and reviewed when the need arises to suit the prevailing circumstances.

As observed by Morowei (2010), ethical practice is the basis upon which the relationship between an organization and the external constituents are built, which in turn



promotes patronage. Ethics is very germane in the running of the affair of the university, it is therefore, expedient that university management puts in place measures to ensure the exhibition of high moral standards by the academic staff. This can be attained through appropriate ethical orientation.

Ethical orientation refers to an individual academic staff's basic attitudes, beliefs or feeling in relation to moral principles that guide their behavior and conducts in service delivery. As observed by Jones et al (as cited in Uyari and Ozer, 2011), ethical orientation has to do with basic orientations such as utilitarianism, justice and honesty, duty and responsibilities, cultural recognition and self-interests, made use of by an individual in making ethical decisions.

Aupperle (2018) therefore, identified four dimensions of ethical orientation viz: justice, deontology, relativism and teleology. According to him, an individual with justice ethical orientation exhibits fairness while making decision as evident in traits such as openness, impartiality, integrity and uprightness. With this, such individual puts the interest of all stakeholders in consideration while taking professional decisions. The deontological ethical orientation requires an individual to show behavior that conforms with rules and regulations when making professional decisions.

Relativism ethical orientation indicates that the way ethical decisions are perceived differs from one individual to the other, as this could be influenced by their family background, the society they find themselves as well as their cultural and ethnic affiliations. Therefore, an action that is regarded as being moralistic in a particular society or culture can be regarded as being unrighteous in another society (Gupta, 2010). The teleological ethical orientation has to do with taking cognizance of how beneficial an ethical decision will be to the individual or the society making such. This action will be adjudged moral and proper if it has the ability to promote the personal development of an individual (Ben & Buckley, 2001).

Namagembe and Ntayi (2012) observed that ethical orientation of an individual academic staff had direct relationship with professional

behaviours, especially in relation to relativistic and idealistic orientations. According to them, relativistic ethical orientation holds that the issue of what is right or wrong cannot be said to be universal, as they differ from one individual to the other or from one society to the other. This therefore, implies that the ways and manners academic staff carry out their professional tasks will be dependent on their perception of what is morally upright or otherwise based on their cultural orientation. It should however, be noted that the ethical orientation of lectures has to go hand in glove with the institutional ethical orientation through the knowledge of the spirit and letters of the code of conduct of each university. The idealistic ethical orientation emphasizes idealism in making decision on what is right or wrong. A faculty whose ethical orientation is idealistic beliefs that behavior that is "morally good" will to a large extent bring about results.

In a study carried out by Greenfield (2008) on the effect of ethical orientation and professional commitment on Earnings Management Behaviour, using 375 undergraduate students, the study specifically examined the impact of an individual's ethical ideology and level of professional commitment on earnings management decision. The study found out that a significant relationship existed between an individual's ethical orientation and decision making, and that participants with high levels of professional commitment engaged in earning. It should be stressed that the code of conduct is a mean towards the attainment of professional commitment of employees. This is because the code of conduct paves the way for the sharpening of the orientation of an individual employee, as it provides a course of action towards the attainment of moral uprightness. Therefore, personal ethical orientation will be a catalyst for the adherence to the institutions' code of conduct that serves as ethical guidance for lecturers' professional attitudes within the institutions.

The professional conduct of Academic staff refers to the behavior or work etiquette that are expected to be exhibited that will translate to quality service delivery that will take care of the needs of every stakeholder in the

system. Wainaina, Mwisukha and Rintaugu (2015) posited that professional conduct has to do with the exhibition of appropriate behavior by professionals in the conduct of their affairs in the work place as well as in dealing with every stakeholder. The academic staff are 'in loco parentis' to their students and are responsible for the intellectual and moral development of the learners through the inculcation of the right types of values, attitudes, and skills in them.

For these roles to be effectively carried out, academic staff should also manifest some kinds of behavior that will be devoid of disappointment, since the expectation of the society is for academic staff as teachers to be role models and shining examples to their students. Iroegbu and Uyanga (2019) researched on the relationship between the professional ethics of lecturers and the quality of outputs of Federal Universities in South-South Nigeria. Using a correlational research design, and a sample of 1,275 teaching staff and 3,021 students selected through purposive and random sampling techniques, it was found out that the professional ethics of lecturers as measured by professional competence, professional integrity and professional accountability significantly predicted the quality of outputs of Federal Universities in the study area.

In the same vein, Wainaina, et al (2015) carried out a study to assess the professional conducts of Academic staff in public universities in Kenya. The study was an exploratory one involving 50 randomly selected students from three public universities in Kenya. The finding showed that the sampled academic staff demonstrated fairly morally acceptable behavior on some behavioural characteristics such as keeping of confidential information and desisting from making false statements concerning colleagues or the university system but not on dressing with decorum and treating colleagues with respect and dignity.

According to the University of Uyo (2015), the code of conduct for academic staff include but not limited to: obedience to the laws and regulations of the university; maintenance of honesty, fairness, integrity and high performance in all activities; showing

respect to the statutory rights of staff and students; non-involvement in or being a member of secret societies; non-victimization of students for sex, immoral, ethnic, religious or personal reasons; must not write assignments/ projects for students; should not divulge official secrets, alter or forge official documents or and/ abet others in doing same; avoiding compelling students to buy books/ handouts overtly or covertly using tactics such as keeping records of students names and matriculation numbers; observance of all copyright laws and acknowledging authors / students when their works are used; avoidance of any action that can tarnish the image of the university; ensuring proper conduct, supervision and invigilation of examinations when scheduled; ensuring timely release and proper custody of examinations scripts and results. In short, the underlining principle of the code of conduct for the academic staff is targeted towards accountability, due process, integrity, transparency and university's growth and development.

From the foregoing, it is evident that university academic staffs have the responsibility for the adherence to ethical principles with regards to intellectual integrity, academic freedom and being fair and courteous in treating other stakeholders in the system. It is against this background that this study has investigated the individual academic staff ethical orientation in relation to their professional conduct with particular reference to public universities in Lagos and Ogun States, Nigeria.

### **Statement of the Problem**

The academic staff in any university are required to be involved in the intellectual and moral development of learners and are expected to live above board by exhibiting high level of integrity in the discharge of their responsibilities. However, in Nigerian universities, experience and observation have shown that there are a lot of ethical issues that have to do with the professional misdemeanors of lecturers in the institutions. These are evident in misconducts such as sex for marks, sexual harassment, plagiarism, examination malpractices; results alteration, money or gifts for grades and other practices

that are inimical to the attainment of integrity of the system. These conducts appear to be attributable to the ethical orientation of the academic staff in relation to how they relate with ethical issues surrounding their activities in the university system.

It is as a result of this, that the researcher was promoted to investigate the Academic staff ethical orientation and professional conducts in public universities in Ogun and Lagos States, Nigeria.

**Purpose of the Study**

The study specifically sought to:

1. investigate the association between relativism ethical orientation and professional conducts of Academic staff in public universities in Lagos and Ogun States.
2. examine the association between idealistic ethical orientation and professional conducts of academic staff in the universities.

**Research Hypotheses**

The following hypotheses were formulated and tested:

**Ho1:** There is no significant correlation between relativism ethical orientation and academic staff professional conducts in the universities.

**Ho2:** Idealistic ethical orientation does not have significant association with Academic staff Professional Conducts in the Universities.

**Methodology**

The descriptive survey research design was used for the study. The population comprised all academic staff in all the five public universities (two federal and 3 state owned) in Lagos and Ogun State. The sample size comprised 225 academic staff selected from

three universities; Federal University of Agriculture, Abeokuta; Lagos State University and Tai Solarin University of Education out of the five universities in the two states, using disproportionate and random sampling techniques. A researcher-designed 20 item instrument titled “Ethical orientation and Professional Conduct Questionnaire” (EOPCQ) was used to collect data for the study. The questionnaire consisted of two sections, A and B. Section A sought information on the bio-data of the participants, while section B consisted of three parts with each part eliciting responses on idealistic orientation, relativism orientation and professional conducts of academic staff. Three research assistants who are academic staff in each of the sampled universities were used in collecting data for the study.

The face and content validity of the instrument was determined by two lecturers in Educational Management in University of Lagos. The instrument was trial tested in Olabisi Onabanjo University, Ago-Iwoye using test-retest reliability method, and a reliability co-efficient of 0.84 was obtained. The high value of the co-efficient signified that the instrument was to a large extent consistent in measuring what it was designed to measure.

Data obtained were analysed using Pearson’s chi-square statistical tool to test the hypotheses at 0.05 level of significance.

**Results**

**Ho1:** There is no significant correlation between academic staff relativism ethical orientation and professional conducts.

Pearson chi-square statistic was used to test the hypothesis, the result is presented in table 1

**Table 1**  
**Academic staff Relativism Ethical Orientation and Professional Conducts**

Variable	N	Mean	SD	DF	X <sup>2</sup>	P	Remarks
Relativism ethical orientation	225	43.07	7.31	12	68.9	.0002	Ho1 rejected
Professional Conducts		28.21	5.06				

P<0.05



A chi-square test of independence was performed to examine the correlation between academic staff relativism ethical orientation and professional products. The relationship between these variables were positive and statistically significant ( $X^2 = 68.9$ ;  $N = 225$ ;  $df = 12$ ;  $P = .0002$ ). Since the P value (.0002) is less than the significance level (0.05), the null hypothesis is hereby rejected. It then means

that there was a significant correlation between the relativism ethical orientation and academic staff professional conducts.

**Ho2:** Idealistic ethical orientation does not have significant correlation with academic staff professional conducts.

Pearson’s chi-square was used to test the hypothesis, the result is presented in table 2.

**Table 2**  
**Academic Staff Idealistic Ethical Orientation and Professional Conducts**

Variable	N	Mean	SD	DF	X <sup>2</sup>	P	Remarks
Idealistic orientation	225	33.16	6.39	12	23.92	.0003	Ho2 rejected
Professional Conducts		28.21	5.06				

P<0.05

Table 2 shows the Pearson’s Chi-square goodness of fit test to determine the correlation between idealistic orientation and academic staff professional conduct. The relationship is positive and statistically significant ( $X^2 = 23.92$ ;  $N = 225$ ;  $df = 12$ ;  $P = 0.0002$ ). since the P value (.0003) is less than the significance level (0.05), the null hypothesis is thus, rejected. This therefore, implies that Academic staff idealistic ethical orientation and Professional Conducts were significantly correlated.

members. The present study also corroborates the earlier one by Johari, Mond-Sanusi and Chong (2017) that employees with well-built relativism ethical orientation exhibited unpleasant behavioural pattern while taking decision. In the same vein, Okon, Edwinah and William (2018) found out that a considerable association existed between relativism and the extent of continuity of an organization, as relativism has a far-reaching influence on employees’ service delivery, job contentment and organizational development

**Discussion**

The first result showed that there was a significant correlation between relativism ethical orientation and academic staff professional conducts. This is an indication that the job behavior of academic staff of universities is dependent on what their cultural background holds with regards to what is right or wrong in the society. In other words, the culture of academic staff has overriding influence on their professional practices. This finding however, contradicts Hard, Wiguna, Anita and Zakaria (2018) who found out that negative relativism ethical orientation did not have effect on employees’ divulgence of illicit, wrongful and non-conforming behaviors exhibited by organizational

The second result showed that academic staff idealistic ethical orientation had significant association with Professional Conducts. This means that the individual academic staff orientation towards what is right or wrong is a determining factor in his/her professional engagements, and that the tendency of an academic staff to engage in unethical behaviour can be propelled by their ethical orientation which has overriding influence on the person’s reaction towards the laid down institutional rules and regulations. This present finding confirms Murdowe and Anderman (as cited in Namagember and Ntayu 2012) who found out that ethical conducts of university academics was hinged on their ethical orientation, and besides, the academics whose



ethical orientation is idealistic in nature were more susceptible to getting involved in professional misdemeanors. This is based on the premise that ethical orientation regulates the behaviour of lecturers and this is the more reason why they need integrity so as to forestall threats to their profession. They are therefore, expected to display morality and uprightness in their professional endeavours.

### **Conclusion**

The study has shown that the ethical behavior of teaching staff in universities is crucial in the attainment of integrity of the system. The professional conducts of academics are determined by their respective ethical orientations. Specifically, the relativistic and idealistic orientations in relation with institutional ethical rules that guide their behaviour. have been found to influence the professional behaviours of the academic staff. These thus, dictate if anyone of them will fall to any of the professional vices or not. The cultural background of an academic staff was found to be predictive of their exhibition of morality in taking decisions in relation to their profession tasks. In another dimension, personal idiosyncrasies of academic staff have been found to contribute to their professional behaviours.

Therefore, considering the importance of the university in moulding the characters of the future leaders who are to contribute to the national development and the role played by the academic staff in this direction cannot be under-estimated. It is thus, expedient that continuous efforts should be made by institutional administrators to provide basis for further deliberate arrangement that is capable of stimulating upright behaviors as bedrock for impressive operation of the university system.

### **Recommendations**

Arising from the findings of the study and the conclusion inferred from it, the following recommendations are made:

University administrators should put in place policies that will promote desirable ethical practices among academic staff. In doing this, the institutional climate should be such that

encourages international best practices and professionalism among lecturers in the discharge of their responsibilities. Therefore, management should be unwavering in dealing with ethical issues, hence, all unethical practices should be dealt with without fear or favour.

There should be regular capacity building programmes for academic staff on ethical practices. Infact, on recruitment, orientation programme on professional ethics should be organized for new members of staff, and for the old staff, ethical awareness programmes should be continuously organized so as to keep them abreast of the consequences of unprofessional conducts. Academic staff should therefore be made to be aware that their cultural background and personal idiosyncrasies have to be subordinated to the general interest as far as their professional conducts are concerned.

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# Assessment of the Implementation of the Objectives of Universal Basic Education Programme in Bayelsa State

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## Abstract

*The study evaluated the objectives of the Universal Basic Education programme in Bayelsa State using Tyler's objective model. Six research questions guided the study and one hypothesis was tested. The target population for the study comprised 7,023 teachers in primary and junior secondary schools, out of which 2,107 were randomly selected to form the sample of the study. A questionnaire was used to collect data from the respondents. The face and content validity of the instrument were ensured by two experts in the Department of Measurement and Evaluation. Cronbach alpha technique was used to establish reliability of the instrument and a reliability index of 0.89 was gotten. Descriptive and inferential statistics were used to answer the research questions and analyze the hypothesis at 0.05 level of significance. The results of the study amongst others revealed that there is a decrease in the enrollment of primary pupils and Junior Secondary School students in Bayelsa State. It is recommended that seminars and workshops should be organized by the Bayelsa State Government so as to sensitize parents and community on the need for the enrollment of their children/ wards into primary and Junior Secondary Schools.*

**Key Words:** Evaluation, Tyler's Model, Universal Basic Education, Objectives, Programme

## Introduction

Evaluation is a process that critically examines a programme. It involves collecting and analyzing information about the programme's activities, characteristics and outcomes. According Nwigbor & Obilor (2019), evaluation is a systematic determination of a subject's merit, worth and significance, using criteria governed by standard. Evaluation helps organizations, programmes, projects or any other intervention or initiative to assess any aim, realizable concept/proposal, or any alternative in decision making, or to ascertain the degree of achievement or value in regard to the main aims and objectives (Staff, 2012). Evaluation is the structured interpretation and giving of meaning to predict or actual impacts of proposals or results. It looks at original objectives, and at what are either predicted or what was accomplished and how it was accomplished. An evaluation makes use of a systematic process of inquiry that includes developing the criteria or standards for

evaluation, the collection of relevant data and then making judgments about the object of the evaluation by applying those previously developed standards in order to determine quality. Evaluation is made for the purpose of gathering information in order to make rational decisions about changing elements of the programme. This interpretation of evaluation simply means that the decision makers are fully intent on using data to alter the system, to judge its value and to change its direction if necessary.

Evaluation can be formative, this means that it takes place during the development of a concept or proposal, project or organization, with the intention of improving the value or effectiveness of the proposal, project, or organization. Formative evaluation provides the information on the improvement of a product or a process. Evaluation can also be summative, drawing lessons from a completed action or project or an organization at a later point in time or circumstance. Summative evaluation looks at

the impact of an intervention on the target group. This type of evaluation is mostly concerned about the project or programme and the funding bodies. Some of the key reasons why one should undertake a summative evaluation are: summative evaluation provides a means to find out whether a project has reached its goals/objectives/ outcomes; it allows one to quantify the changes attributed to a project so that one can trace how the impact of different projects worked, and make result – based decisions on future spending allocations (taking into consideration unintended consequences); it allows one to develop a better understanding of the process of change, and to find out what works, and what does not work, and why it does not work (Nwigbor & Obilor, 2019).

Tyler's model of programme evaluation was developed by Tyler in 1949, and was discussed in a book titled "Basic Principles of Curriculum and Instruction. The model focused on the extent to which objectives are realized. It requires that the goals be clearly articulated and expressed in ways that are measurable to the programme outcome. This approach provides a clear and succinct description of the programme and as well delineates a process of measuring the degree to which the objectives are attained. The model aims at student's developing behaviors as the curriculum target of teaching. It is certainly one innovation in the field of education as observed by Chen, Chen & Cheng (2005) which is now used as an approach that helps to have better curriculum development in regard to the curriculum's objectives. Tyler's model engages internal comparison of outcomes with objectives; it's mode of evaluation do not apply for costly and disruptive comparisons between experimental and control groups. The model calls for the measurement of behaviorally defined objectives, hence emphasis is put on learning outcomes instead of organizational and teaching inputs. In this case, the model helps to avoid the subjectivity of the professional judgment or accreditation approach (Madau & Stufflebeam, 2000).

The Universal Basic Education (UBE) programme in Nigeria was launched by former President Olusegun Obasanjo as remarked by

Amuchi, Asotibe & Christina (2015) on the 30th of September 1999, with the goal of providing 'free, universal and compulsory basic education for every Nigerian child aged 6-15 years. It is the product of the declarations on basic education as a right of every child. The aim of that fundamental right of the child as observed by Asuru, (2015) is for the child to be trained and educated in preparation for adult. The programme, however, was not able to take off immediately after its launch as it did not have legal backing. Therefore, initial UBE-related activities were carried out only in areas of social mobilisation, infrastructural development, provision of instructional materials, etc. The UBE programme only took off effectively with the signing of the UBE Act in April 2004. The National Policy on Education, 2004 section 3 therefore defines Basic Education as a type of education comprising 6 years of primary education and 3 years of junior secondary school. The UBE has three main components: universal, basic and education. Labo-Poppola, Bello & Atauda, (2009) sees the Universal here to mean that the programme is for every one irrespective of tribe, culture or race and class, the term basic to depicts that it is a fundamental or essential thing that must be given or have and that it is the root for acquisition of any knowledge. It is their belief, without it, nothing may be achieved and that it is on this factor that every other thing rests on. Hence, UBE can be seen as that type of education that every individual must have it. It is not a privilege but a right and it is the sum total of an individual's experience for the prescribed ages.

According to Amuche, et al. (2015), the UBE programme as spelt out in the implementation guidelines, aims at achieving the following specific objectives: developing in the entire citizenry a strong consciousness for Education and a strong commitment to its vigorous promotion; the provision of free, universal basic education for every Nigerian child of school-going age; reducing drastically the incidence of drop out from the formal school system; catering for the learning needs of young person's who for one reason or another, have had to interrupt their schooling through appropriate forms of complimentary



approaches to the provision and promotion of Basic Education; and ensuring the acquisition of the appropriate levels of literacy numeracy, manipulative, communicative and life skills, as well as the ethnical, moral and civic value needed for paying. The main beneficiaries of the programme are categorized as: children aged 3-5 years, for Early Children Care and Development Education (ECCDE); children aged 6-11+ years for primary school education; and children aged 12-14+ years for junior secondary school education. (Universal Basic Education Commission, 2018).

In order to achieve the above mentioned objectives, an Act tagged UBE Act was enacted on the 26 May, 2004. It was titled "Act to provide for compulsory, free, universal Basic Education and other related matters". Following the enactment of the Act, the Universal Basic Education Commission (UBEC) was established. The Act provides three sources of funding for the implementation of the UBE, which are Federal Government Grant of not less than 2% of its consolidated revenue fund; funds or contributions in the form of Federal Guaranteed Credits and local or international donor grants. Although, this Act covers both the State and the Local Governments, the State government can only benefit from the Federal Government block grant meant for the implementation of the UBE if it can contribute at least 50% of the total cost of the project. This is to ensure the state's commitment towards the project. To ensure that the UBE project enjoys a wide coverage, the Act provides sanctions for parents who fail to send their children and wards to school. Also, in order to ensure that poverty is not a hindrance to schooling, the project provides free textbooks in core subjects as well as abolishes tuition at the primary school and at the junior secondary school levels. The enactment of the UBE Act has a legal implication, which makes it compulsory for provision of universal, free and compulsory 6 years of primary education and the first 3 years of secondary education. It is also expected that junior secondary schools shall be an autonomous body, not having much to do with the senior secondary school. In order to achieve this, all states of the federation have given the junior schools their

autonomy. Thus, the junior secondary schools operate as separate bodies, having their own principals, vice-principals and members of teaching and non-teaching staff.

Habiba (2012) assessed the adequacy of infrastructural and instructional facilities provided for effective implementation of Universal Basic Education Programme (UBEP) in Nigeria, Two (2) States each were selected from the six geopolitical zones of Nigeria in which three local government areas from each of the States selected were used. The findings of the research revealed that infrastructural and instructional facilities were inadequate for the implementation of UBEP in Nigeria. The programme was also found to be grossly underfunded and lacks requisite teachers which hampered its effective implementation. It was also discovered that supervision, monitoring and evaluation had positive impact on the implementation of UBEP. However, the programme lacked qualified and motivated staff. The study also established that free and compulsory education was partially implemented. Ikoya and Onoyase (2008) examined the availability and adequacy of schools' infrastructural facilities for implementation of the Universal Basic Education program in Nigeria and the study revealed the inadequacy of physical facilities for effective implementation of the UBE program. Yaya, Arowosala and Asunmo (2015) x-rayed the background and objectives of the State Universal Basic Education Board (SUBEB) scheme as well as that of the school library and concluded by admonishing the State Universal Basic Education Board (SUBEB) of each State to provide an enabling environment for library personnel to effectively discharge their traditional roles in order to reposition the UBE scheme through its services. The paper also urged the government to devote more funds to the UBE scheme in order to construct modern library infrastructure and maintenance of the existing school library structures.

#### **Problem of the Study**

Universal access to education has been the prime target for Nigeria in the last four decades and Nigeria is a signatory to World Declaration on Education for All. It, therefore, can be said that at both national and

international levels, Nigeria is committed to the provision of basic education to all its citizens. Many attempts have been made in this direction but with little or no appreciable positive impact made. Habiba (2012) opines that in the programme, teachers are poorly motivated, there is lack of community interest and participation as well as inadequate teaching personnel. Other problems identified by study as hindering the implementation of the programme includes lack of infrastructure, mobilization and poor planning.

The Federal Government's released statistics recently showed continuing drop in school enrolment particularly at the basic education level. The figures showed that 17 million children were not enrolled at the primary and junior secondary schools in 2009. According to the former Minister of Education, Dr Sam Egwu, 11million children were not enrolled at the primary level and another 6 million at the junior secondary level. The situation was further compounded by low level of transition from junior to senior secondary school, with a steep 16% drop (The Punch Newspaper, 2010). All these show that there is an inherent problem in the implementation strategy of the UBE programme in Nigeria. As of 2015, Nigeria ranked 103 out of 118 countries in UNESCO's Education for All (EFA) Development Index, which takes into account universal primary education, adult literacy, quality of education, and gender parity (Global Education Monitoring Report, 2019). UNESCO's 2015 review of education in Nigeria found that enrolment at primary and junior secondary levels had greatly increased since 2000. However, transition and completion rates remained below 70% (Nigeria Federal Ministry of Education, 2014). Enrolment rates increased by 130% for secondary education in the period from 2000 to 2013 (based on the latest available statistics from the World Bank), but decreased by 4% for primary level (World Bank, 2019).

It is against this background that this study finds it necessary to assess the primary and junior secondary schools teachers as well as efforts of Bayelsa Government in fulfilling the objectives of Universal Basic Education Programme in Bayelsa State, Nigeria.

### Research Questions

The following research questions were posed to guide the study:

1. What is the trend of enrollment of primary school pupils and Junior Secondary School students in Bayelsa State from 2012 to 2020?
2. To what extent is the Universal Basic Education Free and compulsory in Bayelsa State?
3. How adequate is the Curriculum for the Universal Basic Education Programme?
4. Are the instructional and infrastructural facilities on ground adequate for the effective implementation of the Universal Basic Education programme in Bayelsa State?

### Methodology

The evaluation research design was used for this study. According to Okeke (2004) evaluation research is a research that looks into purpose. It is a systematic assessment of the worth or merit of a programme or project in terms of money, time and effort put into it. The target population for this study comprised all the teaching staff in both primary and junior secondary schools in Bayelsa State. There is 7,023 teaching staff, out of which 4,676 are primary School teachers and 2,347 are junior secondary school teachers. The sample size for this study was 2,107 teaching staff. Out of which (1,403 are primary school teachers and 704 are junior secondary teachers), drawn from the target population. In selecting the respondents for this study, six (6) schools (3 primary schools and 3 junior secondary schools) were randomly selected from each of the eight Local Government Areas in Bayelsa State. Therefore, the total number of sampled schools used in the study was 48. A questionnaire which was constructed by the researcher was used to collect data from the respondents. To ensure face and content validity of the instrument, the initial draft of the instrument was given to two experts in the Department of Measurement and Evaluation, where every mistake was corrected and reframed. Cronbach alpha technique was used to establish reliability of the instrument and a

reliability index of 0.89 was gotten. The research questions were answered using mean and standard deviation. A decision rule was taken on a criterion mean of 2.50 and above

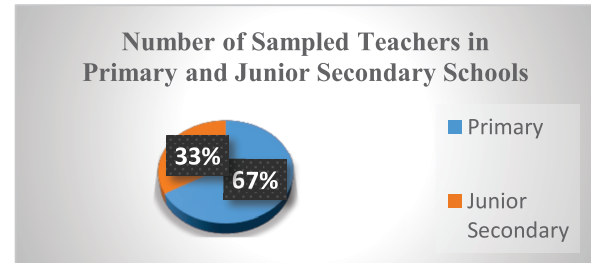
**Results**

**Table 1: Descriptive of Sampled Primary and Junior Secondary Teachers in Bayelsa State**

Teachers	Frequency	Percentage
Primary	1,403	67%
Junior Secondary	704	33%
<b>Total</b>	<b>2,107</b>	<b>100%</b>

Table 1 shows that the teachers selected for this study are made up of 1,403 (67%) primary school teachers and 704 (33%) Junior Secondary School teachers in Bayelsa State. The data is represented in the graph below:

were considered to be high extent while below were considered to be low extent. The hypothesis was tested using the independent t-test at 0.05 level of significance.



**Fig. 1: Number of Sampled Teachers in Primary and Junior Secondary Schools, Bayelsa State**

**Research Question One:** What is the trend of enrollment of primary school pupils and Junior Secondary School students in Bayelsa State from 2012 to 2016?

**Table 2: Summary of the Primary and Junior secondary schools' Enrollment by gender from 2012 2016 in Bayelsa State**

Year	Gender	Primary School Pupils	Junior Secondary School Students
2012	Male	15,4472	19,823
	Female	15,8373	18,703
	<b>Total</b>	<b>312,845</b>	<b>38,526</b>
2013	Male	11,7767	24,496
	Female	119,685	23,447
	<b>Total</b>	<b>237,452</b>	<b>47,943</b>
2014	Male	68,057	21,162
	Female	67,976	20,634
	<b>Total</b>	<b>136,033</b>	<b>41,796</b>
2015	Male	63,220	21,514
	Female	61,449	20,674
	<b>Total</b>	<b>124,669</b>	<b>42,188</b>
2016	Male	57,444	17,879
	Female	54,330	17,472
	<b>Total</b>	<b>111,774</b>	<b>35,351</b>
2017	Male	72,000	19,591
	Female	36,511	12,250
	<b>Total</b>	<b>108,511</b>	<b>31,841</b>
2018	Male	66,258	17,620
	Female	35,987	10,582
	<b>Total</b>	<b>102,245</b>	<b>28,202</b>
2019	Male	73,241	13,939
	Female	24,581	9,635
	<b>Total</b>	<b>97,822</b>	<b>23,574</b>
2020	Male	62,057	13,370
	Female	20,147	8,847
	<b>Total</b>	<b>82,204</b>	<b>22,217</b>

Table 2 shows the trend of enrollment of primary school pupils and Junior Secondary School students in Bayelsa State from 2012 to 2020 with respect to gender. Table 2 shows that there was a decrease in the enrollment of primary school pupils from 2012 to 2020. Table 2 also shows that there was an increase

in enrollment of Junior Secondary Students from 2012 to 2013, and decreased in 2014 till 2020.

**Research Question Two:** To what extent is the Universal Basic Education Free and compulsory in Bayelsa State?

**Table 3: Mean Response of the Free and compulsory nature of the Universal Basic Education Programme in Bayelsa State**

Item	Mean	Standard Deviation	Decision
Textbooks are supplied free to pupils and students in primary and junior secondary schools.	3.09	1.75	High Extent
Children are provided free midday meals.	1.88	0.33	Low Extent
Children are levied to purchase some accessories e.g. chalk, duster etc	1.53	0.9	Low Extent
Ages between 6 to 14 years receive free education in all public schools	2.88	1.33	High Extent
Government takes care of girl-child education	2.91	1.58	High Extent
Government penalized parent who refuse to send children to school	1.51	0.93	Low Extent
UBE cater for drop-out and out of school children effectively	3.92	1.9	High Extent
<b>Aggregate</b>	<b>2.53</b>	<b>1.25</b>	<b>High Extent</b>

Table 3 indicates that there is free and compulsory nature of the Universal Basic Education Programme in Bayelsa though children are not provided with free midday meals and government do not penalize parent who refused to send children to school. In Table 3, the aggregate mean is 2.53 which is above the criterion mean of 2.5, therefore, the

extent to which the government of Bayelsa State operates free and compulsory Universal Basic Education in the state is to moderate extent.

**Research Question Three:** How adequate is the Curriculum for the Universal Basic Education Programme in Bayelsa State?

**Table 4: Mean Response on the Adequacy of the Curriculum for the Universal Basic Education Programme in Bayelsa State**

Item	Mean	Standard Deviation	Decision
The curriculum has been modified to adequately cover the individual and community needs	3.0	1.7	Adequate
The school curriculum emphasizes team work and spirit of enquiry	2.97	1.44	Adequate
Local craft people are involved in the delivery of vocational education	2.72	1.32	Adequate
New curriculum is in use	3.03	1.7	Adequate
New curriculum broadens pupil knowledge generally	2.96	1.48	Adequate
The content of the new curriculum affords students opportunity to be self-reliant after 9 year basic education	3.01	1.82	Adequate
Teaching-learning materials depend on the curriculum	2.98	1.82	Adequate
<b>Grand Mean</b>	<b>2.95</b>	<b>1.61</b>	<b>Adequate</b>



Table 4 indicates that the Curriculum for the Universal Basic Education Programme in Bayelsa State is adequate with an aggregate

mean set of 2.95 which is above the criterion mean of 2.5.

**Research Question Four:** Are the instructional and infrastructural facilities on ground adequate for the effective implementation of the Universal Basic Education programme in Bayelsa State?

**Table 5: Mean Response on the Adequacy of Infrastructure and Instructional facilities**

Item	Mean	Standard Deviation	Decision
The staff are accommodated adequately in furnished offices	1.64	0.97	Not Adequate
There is adequate furniture for pupils	2.7	1.28	Adequate
The librarians are equipped with library facilities up-to-date books	3.01	1.59	Adequate
There is provision for functional science laboratories	1.81	0.09	Not Adequate
The class rooms are commensurate with the enrolment	2.88	1.36	Adequate
There is a functional library in the school	3.16	1.66	Adequate
Classroom are well ventilated	3.09	1.75	Adequate
<b>Grand Mean</b>	<b>2.61</b>	<b>1.24</b>	<b>Adequate</b>

Table 5 indicates that the instructional and infrastructural facilities on ground for the effective implementation of the Universal Basic Education programme in Bayelsa State is adequate with an aggregate mean set of 2.61 which is above the criterion mean of 2.5. The table 5 also shows that in Bayelsa State, the staff are not accommodated adequately in furnished offices.

### Discussion of Findings

Research question one revealed that there is a decrease in the enrollment of primary pupils and Junior Secondary School students in Bayelsa State from 2012 to 2020. It was also revealed that there is a decrease in the enrollment of females both in the primary and the junior secondary schools. The finding of this study is in agreement with the Federal Government's released statistics which showed continuing drop in school enrolment particularly at the basic education level in 2009. The situation was further compounded by low level of transition from junior to senior secondary school, with a steep 16% drop (The Punch Newspaper, 2010). Sahara Reporters (2019) reported that a total of 265,000 children don't have access to Basic Education in Bayelsa State and girls constitute sixty per cent of the figure. This is according to Walton

Liverpool, the Executive Secretary of the Bayelsa State Universal Basic Education Board (SUBEB), who stated this in Yenagoa on the 24<sup>th</sup> January, 2019 during the flag-off of a school enrolment drive to reduce the rate of out-of-school children in the state in partnership with the United Nations International Children's Emergency Fund (UNICEF). He noted that teenage pregnancy compels the girl-child to drop out of school, a development that compelled UNICEF and the state to lay much emphasis on the girl-child in the campaign.

Research question two revealed that there is free and compulsory nature of the Universal Basic Education Programme in Bayelsa State though children are not provided with free midday meals and government do not penalize parent who refused to send children to school. Nwigbor and Obilor (2019) evaluated the objectives of the Universal Basic Education programme in Rivers State and found that the universal basic education programme is not free as expected in Rivers State.

Research question three revealed that the Curriculum for the Universal Basic Education Programme in Bayelsa State is adequate. The finding of this study is in line with the finding of Habiba (2012), who

assessed the adequacy of infrastructural and instructional facilities provided for effective implementation of Universal Basic Education Programme (UBEP) in Nigeria and found that the Curriculum for the Universal Basic Education Programme in the selected schools from the six geopolitical zones of Nigeria is adequate.

Research question four revealed that the instructional and infrastructural facilities on ground for the effective implementation of the Universal Basic Education programme in Bayelsa State is adequate. The finding of this study is not in line with the finding of Ikoya & Onoyase (2008), who examined the availability and adequacy of schools' infrastructural facilities for implementation of the Universal Basic Education program in Nigeria as at 2008, found that the physical facilities for effective implementation of the UBE program in Nigeria is inadequate.

### Conclusions

Based on the findings of this study, it is concluded that there is a decrease in the enrollment of primary school pupils and junior secondary students in Bayelsa State; there is free and compulsory nature of the Universal Basic Education Programme in Bayelsa State though children are not provided with free midday meals; Curriculum for the Universal Basic Education Programme in Bayelsa State is adequate; and the instructional and infrastructural facilities on ground for the effective implementation of the Universal Basic Education programme in Bayelsa State is adequate.

### Recommendations

Based on the findings and conclusions, the following recommendations are made:

1. For increase in the enrollment of pupils and students in Bayelsa State, seminars and workshops should be organized to sensitize teachers, parents and community on the need for the enrollment of their children/ wards into primary and Junior Secondary School.

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## Investigating Students' Attitude towards Mathematics as a Predictor of their Mathematics Achievement in North East Geopolitical Zone, Nigeria

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### Abstract

*The study investigated Senior Secondary school students' attitude towards Mathematics and achievement in Mathematics. The study employed a descriptive research design. The population consisted of all the senior secondary school students in the North East geopolitical zone of Nigeria. Simple random technique was used to select three states from the six states in the North East and the three selected states are Adamawa, Bauchi and Gombe states. There are 557 public senior secondary schools and 77,232 SS2 students in the three selected schools, out of which 217 schools and 30,120 SS2 students respectively were randomly selected for the study. The Mathematics Attitude Scale was used to collect data for the study while the students' Mathematics result of the 2018/ 2019 academic year served as students' Mathematics achievement. The collected data were analyzed using frequency, percentage, linear regression and t-test statistics at 0.05 alpha level of significance. Findings showed that Mathematics performance of students used in the study is low; greater part of the students have negative attitude towards Mathematics; Students' attitude towards Mathematics in the North East geopolitical zone of Nigeria has significant effect on their achievement in Mathematics. There is no significant difference in the male and female senior secondary school students' attitude towards Mathematics in North-East geopolitical zone of Nigeria. It was recommended that Mathematics teachers should use self and cooperative learning packages than the conventional method in the classroom, so as to improve students' attitude towards Mathematics.*

**Key Words:** Attitude, Mathematics, Achievement, North-East

### Introduction

Mathematics plays important roles in human existence both at the national, societal, and individual levels. Mathematics is everywhere and it affects the everyday lives of people. Although it is abstract and theoretical knowledge, it emerges from the real world (Sherman, Richardson, & Yard, 2014) Mathematics is said to be the bedrock of all the sciences and the physical world in general. For instance, in our day-to-day activities like buying and selling, we apply some mathematics concepts like addition, subtraction, multiplication, division, ratio and proportion, etc. According to Dan'inna (2017) without the mathematics of cryptography, there would not be possible the current level of electronic financial transactions crossing the world, and involving billions of dollars. These justify the compulsion of the study of the subject by all students who go through

basic and secondary education in most countries. Mathematics is therefore a core subject at these levels of education in Nigeria. It is regrettable, therefore, that in the contemporary times many students struggle with Mathematics and perform abysmally low in their final examinations in most jurisdictions. In Nigeria, students' performance in Mathematics at the Senior Secondary School has not been encouraging. Candidates are reported to exhibit poor understanding of Mathematical concepts and are unable to form the appropriate Mathematical models which could be tackled with the requisite skills (Chief Examiner's Report, 2019).

The problem is so much in the North-East geopolitical zone of Nigeria and this has led to the widely acclaimed fallen standard of education in this region of the country. The enormity and critical nature of educational



challenges in this region of the country is evident in the increasing poor performance of students in national examinations such as WAEC. The May/June WASSCE results of

the public school students for three years in the three selected states in the North East zone of Nigeria is presented in Table 1 below.

**Table 1: Students' Pass Rate in Mathematics in May/ June WAEC Examination according to three States in the North-East Geo-political Zone of Nigeria**

State	Year 2016	Year 2017	Year 2018
Adamawa	42.7%	42.05%	34.54%
Bauchi	32.6%	23.37%	20.24%
Gombe	17.2%	24.88%	16.82%

Source: WAEC Results Statistics (2019)

Moreover, according to Naija News (2019), Adamawa, Bauchi and Gombe states are among the states that occupied the bottom ranking chart as the worst performed states in the 2019 West African Examination. Bearing in mind the importance attached to the subject, the continued under achievement would lead to ripple effects which would undermine the future development of the North East geopolitical zone, and the country at large. It limits the learner's choice on career opportunities and also makes learning and mastering of other subjects across the curricular difficult, otherwise the well set objectives of the subject can hardly be achieved due to underachievement in mathematics as a subject (kiswili, 2017). While most reform efforts seems to embrace the importance of proper learning objectives and instructional methods, they fail to realize the full impact of students attitudes and beliefs can have on learning and achievement. This study confirms the fact that instructional design alone however relevant it may be, cannot alone result in better learning and achievement. The instructional designers must embrace other crucial factors touching on the affective domain which have been proved to affect student learning in a bid to strive and build a bridge between the goals or objectives of Mathematics and the student performance. It is important to note that students are not just cognitive individuals but also social persons with beliefs, emotions that influence their learning and achievement (Zan & Martino, 2018).

Attitude as a major factor affecting learning processes, may be implicit hence has not attracted enough attention from all

stakeholders in education and therefore, it is important to consider the fact that learners can mainly contribute to their learning outcomes as a result of their belief and perceptions about the subject matter e.g. whether they like it or not and whether they see any value in it. Attitude is a central part of human identity. Attitude as a concept is concerned with an individual's way of thinking, acting and behaving. Everyday people love, hate, like, dislike, favour, oppose, agree, disagree, argue, persuade etc. All these are evaluative responses to an object. Hence attitudes can be defined as 'a summary evaluation of an object of thought' (Bohner & Wänke, 2012). Tahar, Ismail, Zamani, and Adnan (2010) define attitude as a positive or negative emotional disposition towards mathematics. From this, when defining attitudes towards Mathematics, both aspects of beliefs and emotions should be considered. A positive attitude towards Mathematics reflects a positive emotional disposition in relation to the subject and, in a similar way, a negative attitude towards Mathematics relates to a negative emotional disposition (Zan & Martino, 2018). These emotional dispositions have an impact on an individual's behavior, as one is likely to achieve better in a subject that one enjoys, has confidence in or finds useful (Eshun, 2014). For this reason positive attitudes towards Mathematics are desirable since they may influence one's willingness to learn and also the benefits one can derive from mathematics instruction (Eshun, 2014). Negative dispositions induces tendencies of fear, anxiety and stress where one resorts to other non-productive practices which finally prevents them from experiencing the richness

of Mathematics and many approaches that could be used to develop competencies in the subject. Consequently, the student exhibit low motivation, decreased level of participation, boredom and behavioural problems including class or lesson avoidance. This is evident when students form the habit of leaving the classroom either before or during the mathematics lesson under the pretense of easing themselves and when students refuse to do assignments.

Attitude towards Mathematics is defined as liking or disliking of the subject; a tendency to engage in or avoid mathematical activities; a belief that one is good or bad at mathematics; and a belief that mathematics is useful or useless (Kibrislioglu, 2016). Attitude toward Mathematics according to (Moenikia & Zahad-Babelan, 2010) is one of the important elements to explain mathematical learning. Students with high mathematics attitude tend to be more successful in learning mathematics than those with low attitude (Ma & Krishor, 2017). According to Syyeda (2016), attitude takes into account three components: affect, cognition, and behaviour. Affect is composed of emotions, beliefs, and vision of the subject. Emotions are the feelings of enjoyment or pleasure in learning the subject or seeing it as boring, difficult, and dull. Beliefs are related to students' confidence in their abilities to learn the subject. Vision represents students' perception regarding mathematics. Cognition represents the students' perceived usefulness of the subject. Conversely, behaviour is connected to students' motivation to learn that is reflected with student's actions, commitment, and performance in class.

Moreover, there are several factors that play vital role in influencing student's attitude. These factors can be categorised into three distinctive groups. Firstly, factors associated with the students themselves. Some of these factors include student's mathematical achievement score (Köğçe, Eagly & Chaiken, 2019). Also, anxiety towards mathematics, student's self-efficacy and self-concept, extrinsic motivation and experience at high school (Tahar, Bergemann & Olson, 2010). Secondly, the factors that are associated with the school, teacher and teaching. Some of

these factors that influence attitudes are teaching materials used by teacher, teachers' classroom management, teachers' content knowledge and personality. In addition, teaching topics with real life enriched examples, student's opinions about mathematics courses (Yilmaz, Altun & Olkun, 2010), teaching methods, reinforcement (Papanastasiou, 2019), receiving private tuition (Köğçe et al, 2019). Furthermore, teachers' beliefs towards mathematics (Cater & Norwood, 2017) and teachers' attitude toward mathematics. Thirdly, factors from the home environment and society also affect students' attitude towards mathematics. Factors such as educational background of parents, occupation of parents (Köğçe et al, 2019) and parental expectations (Tobias, 2013) play a crucial role in influencing students' attitude towards mathematics. Due to these several factors students have different attitude towards mathematics. More often, the public image of mathematics is labelling it as a difficult, cold, abstract, theoretical and ultra-rational subject (Ernest, 2014).

Dan'inna (2017) investigated whether or not students' attitude towards Mathematics can serve as a predictor of their academic achievement in the subject, and whether or not there exist any significant difference between boys and girls in their attitudes towards mathematics. The population of the study was 114,504 senior secondary school students spread across the 34 local government areas of Katsina state, Nigeria. The subjects were a sample of 383 students from 8 schools which were selected using mixed / multistage sampling procedure and the Research Advisors 2006 guideline. The Modified Fennema-Sherman Mathematics Attitude Scale (FSMAS) was the instrument used for data collection. The study revealed that there was a significant relationship between students' attitudes towards Mathematics and their academic achievement in the subject ( $r = .756$ ,  $P = .00$ ). Similarly, the findings also revealed that significant gender difference exist in students' attitudes towards Mathematics ( $t = 5.736$ ,  $P = .00$ ) in favour of male students. Michelli (2013) investigated how fifth grade students' attitudes affect their



achievement in Mathematics. The results indicated that there is a significant relationship between attitudes and achievement in Mathematics. Moreover, males had a more positive attitude towards Mathematics compared to females, but both genders scored approximately the same on the achievement test.

Ngeche (2017) examined the relationship between student attitudes and performance in Mathematics in secondary schools in the North West region of Cameroon. The study revealed a significant relationship between student attitudes and performance in Mathematics. The study also revealed that the cognitive, affective and behavioural attitudes of students influence their performance in Mathematics. Langat (2015) determined the effect of students' attitudes towards their learning and achievement in Mathematics by first trying to establish their attitudes regarding the subject and also finding out the factors that influence these attitudes. The study involved some seven sampled public secondary schools in Kiambu County, Kenya. The study found out that most students had a positive attitude towards Mathematics and that they perceived Mathematics as doable, learnable and important yet this did not translate to good grades. The findings also show that perceptions and beliefs, perceived learning abilities and competencies and previous performances of students in mathematics affected their level of motivation leading to low outcomes.

Attitude can also be gender related. There are many who hold the view that males do better in Mathematics than females. This belief tends to affect the attitude of females towards Mathematics. Lindberg, Hyde, Petersen, & Linn, (2010), in their study, gathered data from 242 different studies, totaling 1,286,350 students. The findings indicated that there were no significant gender differences, hence nearly equal male and female variances. Asante (2012) have reported significant differences when comparing girls' and boys' attitude towards mathematics. A meta-analysis conducted by Etsey & Snetzler (2018) taking into consideration 96 studies (n = 30,490) concluded that gender differences in

student attitudes toward mathematics do exist but are small. The results indicate that males show more positive attitude. However in elementary school studies the effect size was about 0.20 in favor of females and for grades 9 to 12 the effect size was similar, 0.23, but in favor of males. Also Sanchez, Zimmerman, & Ye (2014) in a study with North American students found significant gender differences in eighth grade students' attitudes towards mathematics. American boys showed more interest in mathematics than girls, but girls perceived mathematics as more important than boys. Girls also presented higher scores on items with regard to difficulties with mathematics.

The role of affective domain in enhancing effective learning in any discipline cannot be neglected, hence students' attitude towards Mathematics play significant role in enhancing their achievement in the subject as noted by various researchers. In line with this, the need to have an empirical study that will establish whether students' attitude towards Mathematics can serve as a predictor of their achievement in the subject was what motivated the researcher to carry out this research.

### **Problem of the Study**

The persistent under-achievement in Mathematics in the North East geopolitical zone of Nigeria has warranted further research to determine what factors have not been considered nor given enough attention. The attitude of students towards Mathematics is a factor that is known to influence students' learning and achievement in the subject. Studies on students achievements in Mathematics have mostly pointed to the fact that student's attitude is a major contributor yet has received very little attention if any. There is therefore a need to study the effect of student attitudes on their Mathematics academic performance. However, research on the relationship between student attitude and performance has also been inconclusive. Researches that have been conducted to determine the relationship between students' attitude towards Mathematics and achievement in Mathematics have yielded contradictory results. The findings have thus

lacked consistency on the subject. Some studies have demonstrated a strong and significant relationship between Mathematics attitude and Mathematics achievement (Minato & Yanase, 2018, Randhawa & Beamer, 2019, Schenkel, 2019). In the Schenkel's (2019) study of positive correlation between student attitude and student performance was found. Student beliefs and attitudes were found to have the potential to either facilitate or inhibit learning. In a comparative study of factors influencing Mathematics achievement.

Some researchers have, however, demonstrated that the correlation between attitude towards Mathematics and achievement in Mathematics was rather weak and could not be considered to be of practical significance (Vachon, 2018; Wolf & Blixt, 2011). In a meta-analysis of 113 primary studies involving elementary and secondary school children, Ma and Kishor (2017) found that attitude towards Mathematics and achievement in Mathematics was positively and reliably correlated but not strong. The correlation was not statistically significant. Flowing from the preceding findings, studies in different cultural settings are eminent to realize the influence of student attitude towards Mathematics on student learning outcomes in the subject. Moreover, studies that investigated students' attitudes toward mathematics and its relationships with achievement are scarce in Nigeria, especially in the North East geopolitical zone in particular. Therefore, the researcher seeks to fill the gaps.

### **Purpose of the Study**

The purpose of this study was to determine the effects of the student's attitude towards Mathematics on their achievement in Mathematics.

### **Research Questions**

The following research questions were formulated to guide the study:

1. What is the level of Mathematics performance of senior secondary school (SS2) students in North-East geopolitical zone of Nigeria?
2. What is the attitude of SS2 students towards Mathematics in the North East geopolitical zone of Nigeria?

3. Do students' attitude towards Mathematics predict their achievement in Mathematics?
4. Is there any significant difference between male and female students in their attitude towards Mathematics?

### **Hypotheses**

Based on the above research questions, research questions 3 and 4 were hypothesized as follows:

1. Students' attitude towards Mathematics do not significantly predict their achievement in Mathematics.
2. There is no significant difference between male and female secondary school students in their attitude towards Mathematics.

### **Methodology**

Descriptive survey design was used in the study. The population for the study consisted of all the public senior secondary two students in North East geopolitical zone of Nigeria. Multistage random sampling technique was adopted in the study. The first stage involved the use of simple random technique to select three states from the North East and the three states are Adamawa, Bauchi and Gombe states. There are 557 public senior secondary schools (Adamawa state = 273 schools; Bauchi state= 176 schools; Gombe state= 108 schools) and 77,232 SS2 students in the three selected states (Adamawa state = 29,537 students; Bauchi state= 31,313 students; Gombe state = 16,382 students). Secondly, simple random technique was used to draw 217 public senior secondary schools out of the 557 public senior secondary schools. Thirdly, stratified random sampling technique was used to select 30,120 SS2 students from the selected schools students in the North East (Adamawa state = 11,519 students; Bauchi state= 12,212 students; Gombe state= 6,389 students). The instrument used in collecting the data was the Modified Aiken Revised Mathematics Attitude Scale (Aiken, 1974). It consists of 20 questions with five possible answers for each using a Likert scale Each item was measured on a five-point Likert scale as follows: SA = Strongly Agree, A = Agree, U = Undecided, D = Disagree and SD = Strongly Disagree. The scoring procedure was

that each positive item received the score based on points as follows: SA = 5, A = 4, U = 3, D = 2, and SD = 1. For each negative item the scoring was reversed as follows: SA = 1, A = 2, U = 3, D = 4, and SD = 5. These scores were added to get the total score of a student’s attitude towards Mathematics. Therefore, the highest possible points to be obtained from the 20 statements are 100 points, while the lowest is 20 points. Moreover, higher scores indicate positive attitude while lower scores indicate negative attitude towards Mathematics. Cronbach alpha technique was used to determine the reliability of the questionnaire and 0.92 coefficient was gotten. Validity of research instrument was ensured by the Guidance and Counselling lecturers’ and Educational Measurement and Evaluation lecturers’ expert judgments. The researcher consulted the school management of the selected schools to supply him with the students’ academic achievements in Mathematics during the 2018/2019 Third Term Examination. The raw scores were standardized to Z-scores and T-scores. The data collected were analyzed with the help of Statistical Package for Social Sciences (SPSS 22.0) using various statistics, including the descriptive statistics (mean and standard deviation). In order to test the hypotheses, the researcher used the linear regression and independent sampled t-test.

**Results**

**Research Question One:** What is the level of Mathematics performance of senior secondary school (SS2) students in North-East geopolitical zone of Nigeria?

**Table 2: Description of SS 2 Students’ Grades in the 2018/ 2019 Second Term Mathematics Examinations in the Selected Schools**

Grade	Frequency	Percentage
A1	-	-
B2	5	0.02%
B3	11	0.04%
C4	8	0.03%
C5	22	0.07%
C6	14	0.05%
D7	8,745	29%
E8	6,493	21.6%
F9	14,822	49.1%
<b>Total</b>	<b>30,120</b>	<b>100%</b>

Tables 2 showed the level of SS2 students’ grades in the 2018/ 2019 Third Term Mathematics Examinations conducted in the selected schools used in the study. The result also showed that only 60 (0.2%) of the respondents passed at the credit level. It could be concluded that the level of Mathematics performance of students used in this study is low because the percentage score at credit level was less than 50%. The 0.2% was obtained from the addition of frequency from A1-C6 grade levels in the table.

**Research Question Two:** What is the attitude of SS2 students towards Mathematics in the North East geopolitical zone of Nigeria?

**Table 3: Description of the Students’ Attitude towards Mathematics**

Level of Attitude	Frequency	Percentage
Positive Attitude	2,690	8.9%
Negative Attitude	27,430	91.1%
<b>Total</b>	<b>30,120</b>	<b>100%</b>

Table 3 above revealed the number of respondents that have positive and negative attitude towards mathematics. The scores of the respondents were added to get the total score of a student’s attitude towards Mathematics. Therefore, the highest possible points to be obtained from the 20 statements are 100 points, while the lowest is 20 points. Moreover, higher scores indicate positive attitude while lower scores indicate negative attitude towards Mathematics. Table 3 also showed that 2,690 representing (8.9%) students have positive attitude towards Mathematics while 27,430 representing (91.1%) students have negative attitude towards Mathematics. The results revealed that a greater part of the students used in the study have negative attitude towards Mathematics in North East geopolitical zone of Nigeria.

**Hypothesis One:** Students’ attitude towards Mathematics do not significantly predict their achievement in Mathematics.

**Table 4: Model Summary**

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	0.871	0.759	0.757	0.2316

The above model summary showed that coefficient of determination ‘R Square’ indicates 75.9% of validity in students’

achievement in Mathematics due to their attitude towards Mathematics.

**Table 5: ANOVA**

Model	Sum of Square	Df	Mean Square	F	Sig. (p-value)
Regression	45.281	1	45.281		
				321.843	0.000
Residual	12.052	30118	0.211		
Total	57.333	30119			

Dependent Variable: Mathematics Achievement  
 Predictor: Students’ attitude towards Mathematics

Table 5 above showed the ANOVA result of the linear regression. Testing the null hypothesis, the p-value (0.000) is less than the alpha value of 0.05, this shows a significant difference.

**Table 6: Coefficients of Regression**

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta (β)		
Constant	-0.411	0.231	-	-1.679	0.051
Mathematics Achievement	1.202	0.071	0.871	19.204	0.000

Dependent Variable: Mathematics Achievement  
 Evidences from table 6 above shows the coefficient of regression in which unstandardized coefficient B represents the intercepts and coefficient for independent variable and the significant p-value shows the measure of likelihood which the difference in outcome occurred by chance. The model shows that students’ attitude towards

Mathematics has significant effect on their achievement in Mathematics in which  $p = 0.000$  which is less than 0.05. Thus, regression analysis indicates that students’ attitude towards Mathematics has significant positive effect ( $p = 0.000$  and  $\beta = 0.871$ ) on their academic achievement in Mathematics.

**Hypothesis Two:** There is no significant difference between male and female secondary school students in their attitude towards Mathematics.

**Table 7: Independent t-test of the difference in the Attitude of male and female Students’ towards Mathematics**

Variable	N	Mean	Standard Deviation	df	t	Sig.(p-value)
Male	24,781	32.90	3.17	30,118	0.109	0.914
Female	5,339	31.88	3.23			

$\alpha = 0.05$

Indicators from table 7 above revealed that the male respondents’ mean is 32.90, while the standard deviation is 3.17 and the female respondents’ mean is 31.88 while the standard

deviation is 3.23. The value of t table is 0.109 and p-value is 0.914. Testing the hypothesis at the alpha level of 0.05, the p-value is greater than the alpha value, this shows that there is



no significant difference, hence the null hypothesis is retained. Therefore, there is no significant difference in the male and female senior secondary school students' attitude towards Mathematics in North-East geopolitical zone of Nigeria.

### Discussion of Findings

Research question one revealed that the level of Mathematics performance of students used in this study is low. The poor performance of the studied SS2 students in North East geopolitical zone of Nigeria still reflects on their fellow students in SS3 who wrote WAEC in 2019. These results affirm the reality that performance in mathematics is still an area of concern. Such low performance of mathematics limits the students' choice of career opportunities and make learning and mastering of other subject across the curricular very difficult. The finding of this study is in agreement with the findings of Langat (2015), who found a low performance in Mathematics among the secondary schools sampled. The study interpreted that almost half of the students were scoring D and below, 33% scoring only average of Cs while 18% scored Bs and above.

Research question two revealed that a greater part of the students used in the study have negative attitude towards Mathematics in North East geopolitical zone of Nigeria. This shows that the negative attitude which the sampled students have towards Mathematics definitely have consequences on their performance which is very poor especially in the West African Senior School Certificate Examinations (WASSCE). The finding of this study is not in agreement with the findings of Langat (2015), who determined the effect of students' attitudes towards their learning and achievement in Mathematics by first trying to establish their attitudes regarding the subject. The study found out that most students had a positive attitude towards Mathematics and that they perceived Mathematics as doable, learnable and important yet this did not translate to good grades. The findings also show that perceptions and beliefs, perceived learning abilities and competencies and previous performances of students in

Mathematics affected their level of motivation leading to low outcomes.

Hypothesis one revealed that students' attitude towards Mathematics in the North East geopolitical zone of Nigeria has significant effect on their achievement in Mathematics. The sampled students who were used in the study have negative attitude towards Mathematics and this negative attitude makes them not to feel at ease with Mathematics and also approach mathematics with a feeling of hesitation, thereby resulting to poor performance in Mathematics. The finding of this study is in agreement with the finding of Lawami and Adeyanju (2011), who investigated the effects of attitude on achievement in senior secondary school Mathematics in Ogun State, Nigeria. The findings showed that students' attitude to Mathematics have significant effect on Mathematics achievements

Hypothesis two revealed that there is no significant difference in the male and female senior secondary school students' attitude towards Mathematics in North-East geopolitical zone of Nigeria. The study also revealed that the attitude mean score of male students is higher than their female counterparts. The finding of this study is not in line with the findings of Sanchez, Zimmerman, & Ye (2014), who in their study with North American students found significant gender differences in eighth grade students' attitudes towards mathematics.

### Conclusion

Based on the findings of the study, it is concluded that Mathematics performance of students used in this study is low, the greater part of the students used in the study have negative attitude towards Mathematics. Students attitude towards mathematics in the North East geopolitical zone of Nigeria has significant effect on their achievement in Mathematics, and there is no significant difference in the male and female senior secondary school students' attitude towards Mathematics in North-East geopolitical zone of Nigeria.

### Recommendations

Based on the findings of this research, the researcher recommended as follows:

1. Mathematics teachers should be trained to use self and cooperative learning packages in the classroom, since the strategies are more effective in improving students' attitude towards Mathematics than the conventional method.
2. In case where a student needs more counselling service as a result of extreme negative attitude towards learning mathematics, he/she should be referred to a guidance and counselling master for such a service.
3. Parents at home should encourage their children to learn mathematics, pointing out on the needs to learn mathematics as well as the everyday application of mathematical concepts in solving real life problems.
4. Government at all levels should provide adequate qualified mathematics teachers and teaching and learning materials.

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# Information Repackaging In Public Libraries: An exploratory Study

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## Introduction

Libraries are in the vanguard of information generation, acquisition, processing, organisation and dissemination in institutions, groups and in society for self-development, organisational development as well as for national development, Nwalo (2000). It is an archive for information and historical facts. As observed by Aina (2002), library is concerned with the collection, processing, storage and dissemination of recorded information for the purpose of reading, studying and consultation. In order for a library to attain this goal, many activities are performed by libraries which translate into library and information services. The library is saddled with the responsibility of providing timely, accurate, current, and reliable information to their users.

Oghenetega, Erimieagbon & Lawrence (2014) posited that public library is an organisation established, supported and funded by the community either through local, regional or national government, or through some other(s) forms of community organization. It provides access to knowledge information and works of the imagination through a range of resources and services and is equally available to all members of the community regardless of race, age, nationality, ages, gender, religion language, disability, economic and employment status and educational attainment. Public libraries also provide materials for children that includes books, videos and DVDs, music CDs, and other material (both fiction and non-fiction), often housed in a special section. Librarians at

most public library provide reference and research assistance (help) to the general public, usually at a reference desk but can often be done by telephone interview (Oghenetega, Erimieagbon & Lawrence, 2014).

In recent time, technological developments are creating new forms of information, new sources of information and new ways of providing information by passing traditional institutional like libraries, Gupta (2003). There has been an increasing pressure on libraries to mobilise resources and become self-reliant. Library users are transforming into customers with rising expectations, diverse needs and wants, and choices. Gupta (2003) noted that the real challenge for library and information professionals is not to manage the collection, staff and technology but to turn these resources into services. The notion of services has also changed, from basic to value added, from staff assisted to self-service, from in-house to outreach, from free to priced, from reactive to pro-active, and from mass customisation to individualised service. As in such an environment librarians are finding new ways of serving users or customers effectively and efficiently. The principles of information repackaging have gradually been accepted both as relevant and beneficial to the library environment.

Information is considered as an important resource that contributes towards the development of a nation. It provides an instrument for development of knowledge, the basis for innovations, the resources for informed



citizenry, and as a result, becomes a key commodity for the progress of a society. Members of a society acquire the needed information from a variety of sources, but several of these sources are expensive, complex or difficult for individuals to acquire and use. It is for this type of reasons, the role of libraries becomes vital in meeting the information needs of individuals in the society. Libraries develop their collections, facilities and services to meet the information needs of their patrons. However, in order to accomplish this task effectively, libraries must have a thorough understanding of their users' information need. Information is known to be a vital force to man and for societal changes and development. Information also carries along with it answers to varied human issues, it permeates every discipline and profession of human endeavour including: medicine, law, economics, marketing, politics, security, recreation etc., Okoroma (2014). Information is known to be very useful in decision making. Its availability enables the individual, group or nation to make rational decisions and reduce their level of uncertainty. Advanced economies have maximised the creation and use of hard information and are constantly in dear quest for information. Information in the form of product or services is a tradable commodity that is capable of being sold and bought in the product market, (Okoroma, 2014).

Information repackaging is one aspect of librarianship that ensure information is delivered to prospective user as and when required. Iwhiwhu (2006) observed that information repackaging is the bundling of products and services to address specific needs of users. This is further reinforced by Udensi (2010) when he asserted that information repackaging is the organising or processing of information in a form that can be understood by the different categories of users that the information is meant for. Aboyade, (1987) also emphasised that Information Repackaging (IR) is "the collection and redesigning, remodelling, restructuring, reorganisation and dissemination of information to a peculiar group of people taking into cognisance the socio-economic, cultural and political background of the people". Information repackaging, also known as

information consolidation, refers the public knowledge specifically selected, analysed, evaluated and possibly restructured and repackaged for the purpose of serving some of the immediate problems and information needs of a defined clientele or socio group, who otherwise may not effectively and efficiently assess and use this knowledge as available in the great amount of documents or in its original form (Okoroma, 2014).

#### **Statement of the problem**

In recent times, several alternative sources of information are available for use. This has made many library users to turn their backs on the library. Also, advancement in technology has also posed serious threat to continue use of library information resources in public libraries. This, has called for changes in library services as information is a driving force in this contemporary society.

Information repackaging although is not a new idea, but changes in information technology have called for an enhancement in the process of creating library potential for better information service delivery. Following the trend is the fact that Public libraries budgets are becoming dwindled over time and this has adversely affected effective service delivery in libraries, thereby hindering sustainability of public library existence in meeting the information need of 21st Century users.

It should also be noted that free nature of public library services in Nigeria reveals that users place relatively low value on the receipt of such information, hence users' resist OF any fee or charge placed on library and information services. Most librarians also, are not properly equipped to provide the full range of information repackaging services in order to subsidize for meagre amount budgeted for public library upkeep by government. Also, the nonchalant attitude of users towards public library and alternative information sources that are available in such libraries is enough source of concern for library stakeholders. The situation on ground in public libraries now borders on how libraries can survive in this highly competitive information age. In order to proffer a lasting solution to these problems, this research therefore sought to study the influence which information repackaging would have on

the use of public libraries in Nigeria using Lagos as a location of study.

### Objectives of the study

The objective of the study is to find out what the influence of information repackaging would be on the use of public libraries in Lagos.

Specifically, study will:

- (a) identify available repackaged information resources in public libraries in Lagos, Nigeria;
- (b) identify various information repackaging strategies available in the selected public libraries in Lagos, Nigeria.
- © determine frequency of use of repackaged information resources by users in public libraries in Lagos, Nigeria;

### Research questions

The following research questions will guide the study:

- (a) What are the available repackaged information resources in public libraries in Lagos, Nigeria?
- (b) What are the various information repackaging strategies available in the selected public libraries?
- © What is the frequency of use of repackaged information resources by users of public libraries in Lagos, Nigeria?

### Null hypotheses

There is no significant relationship between information repackaging and use by users of public libraries in Lagos, Nigeria

### Literature review

Nowadays, information has become one of the most important resources in contemporary society. Consequently, librarians need to design information services for clientele based on diagnosis of their information needs as inferred from the roles they play, the structure of such roles in the given work environment or organisation; and their information use patterns, traits and characteristics (Hale, 1986). The need therefore, for information repackaging cannot be over emphasized in this generation of information explosion. Information repackaging as a systematic process of adding value to

information services has some added values with component that include but are not limited to information analysis, synthesis, editing, translating and transmitting its symbolic and media formats (Dongardive, 2013). He also observed that Information repackaging is a process that sees to the repackaging of the analysis of consolidated information in that form which is more suitable and usable for library users. That is, repackaging of information in digital form or in electronic medium like CD, DVD, etc. In other hand repackaging of information is a physical recording, arrangement and presentation of information on a given medium and in a given form. The aim of repackaging is to enhance the acceptance and use of information products and the assimilation and recall of their contents. As it is, Information repackaging can save time, labour, and cost of the user as remarked by, Dongardive (2013). It is also, an avenue according to Greer, Agada, & Grover (1994) FOR a systematic process of adding value to information services. This is in line with the shift from documents to their contents and from collections to their users. Information repackaging is the bundling of product and services to address specific needs. It could possibly be through reformatting and synthesizing of raw information, combining expertise on a subject with access to relevant information sources, providing training or assistance to a user in accessing an information product. Process of repackaging depends on the availability of materials, from research institutes, government sources, online services and networks, and indigenous knowledge. Grey literature is important in repackaging although it may be unattractive and hard to access. Information repackaging can also be seen as part of a process of information consolidation. The process of repackaging begins with the selection of information and the evaluation of content. There are three requirements for information repackaging; the material should be collected and organised efficiently, there should be the capacity to analyse their content and create new information packages from them, the new package should be disseminate freely.

### Need for information repackage in libraries

Abrijo (2003) note that the most obvious truths in the present information scenario happen to be that specific information is still often unavailable; and that much of the information explosion has resulted from information repackaging, not new discoveries. Specific information is needed, but it does not always come in one package to be grabbed away in one go. As time goes by, a growing number of users clamour for organised information, and the need for information in a format made handy is a lifesaver to many people, especially to the managers. This is where information professionals come to their rescue. Information repackaging service could assemble relevant information from a variety of sources such as local archives e.g. government past budgets, performance appraisals and projected goals and plans; and external resources e.g. competitive intelligence, market surveys and government regulatory information (Dongardive, 2013). These sources are checked for accuracy and currency. Their contents are then synthesized and edited to enhance their pertinence to the overall need of the users. Primary information from books, annual reports, video and audio recordings may be reduced to graphs and charts with explanatory notes. Information repackaging could also function as a tool for saving information, a systematic and selective sorter of useful information, a means for more wide information transmission and delivery, a translation tool, an opportunity for the practical application of research results and as a means to promote delivery of relevant information. Dongardive (2013) posited that information repackaging ensures currency, accuracy, pertinence, comprehensiveness, ease of comprehension and convenience of use. The following are the major importance of information repackaging as enumerated by Dongardive (2013):

1. To customise information to user need.
2. To facilitate dissemination, organisation, and for communication.
3. To simplify e.g. an automated bibliography is like a map in the world of information overload.
4. To facilitate interactivity between user, knowledge base, and technology.

In the process of designing the repackaging, it is essential to have specific

information about the target audience to collect, process and apply the required information and design and repackage of information according to user demands. Information Repackaging is very useful and has influence on users' decision to use library information resources in both the public libraries based on the following reasons:

1. It saves time. It ensures timely delivery of relevant information. Information repackaging saves the time user group spend on laborious perusal of bulky information. Bearing in mind that time and labour can be quantified as money, if information can be repackaged for different target group, no doubt they can afford to pay a fee when considering the time and labour they would have spent trying to retrieve the same information from bulky files.
2. Repackaging of information based on a user need ensures wider access to relevant, reliable and usable information. If information is translated in various language dialects selected on the basis of the users needs and presented in a format that are mostly useful to them, surely users can part with their money in order to have them. The reason why some people refuse to pay for information is that most often they cannot decode the message or knowledge content.
3. Repackaging of information gives user group the opportunity to correlate the world of practice with the wealth of information emanating from research structures, experiments and act projects. If there is a direct connection between theory and practice definitely user group will sacrifice to pay.
4. It keeps user group updated on the latest information available and relevant to them. To ensure effective services to target group, one needs a strategy for information repackaging.

### Methodology

The descriptive survey research design of the ex post facto type was adopted for this study because it seeks to gain insight into a phenomenon as a means of providing basic information in information repackaging and use of library. The researcher did not manipulate any of the variables but studied the dependent variable in terms of the retrospective influence as a result of the independent variable. This involved statistical study of sampling a subset of



the population to represent the participants of the study. The population of this study are library users in the National Library of Nigeria, Lagos branch and Lagos State Public Library, Ikeja, Lagos State, Nigeria. The two libraries use for the study do not keep permanent users register but only make use of daily users register which has an average monthly use of 1007 users in the National library of Nigeria, Yaba, Lagos and 1128 users in the Lagos State Library Board, Ikeja, Lagos State. Therefore, the researcher chose these figures for the population of registered users in the two libraries as generated from the two libraries daily register. Therefore, the total user population for this study is two thousand one hundred and thirty five (2135) users. Structured questionnaire was the main instrument of data collection. The study was conducted among two thousand one

hundred and thirty five (2135) registered users in the two selected libraries. The researcher sampled 15% of the population of the study. Therefore, the total sample size for this research was 320 available library users in the two selected public libraries. Hence, sampling was based on user availability in the selected public libraries. Data collected from the respondents with the aid of questionnaire were analysed with the use of Statistical Package for the Social Sciences (SPSS). This was done through the use of descriptive statistical measure such as percentages, mean and standard deviation to analyse the research questions, while research hypotheses were tested using inferential statistics such as correlation analysis. The research hypotheses were tested at 0.05 level of significance.

**Table 1: Sample population**

Name of library	Registered users	Sampled population (15%) approx.
National Library of Nigeria, Lagos State	1007	151
Lagos State Library Board, Lagos State	1053	158
<b>Total</b>	<b>2060</b>	<b>309</b>

*Source: Average monthly users at both National Library of Nigeria, Lagos and Lagos State Library Board, Lagos.*

**Table 2: Demographic distribution of respondents**

Age	Frequency	Percent
15-24	74	23.9
24-34	91	29.4
35-44	106	34.3
44 and above	38	12.3
<b>Total</b>	<b>309</b>	<b>100.0</b>
<b>Gender</b>		
Male	154	49.8
Female	155	50.2
<b>Total</b>	<b>309</b>	<b>100.0</b>
<b>Marital status</b>		
Married	90	29.1
Single	151	48.9
Widowed	15	4.9
Separated	53	17.2
<b>Total</b>	<b>309</b>	<b>100.0</b>
<b>Academic qualification</b>		
SSCE	94	30.4
OND	58	18.8
DEGREE	119	38.5
MASTERS	34	11.0
Phd	4	1.3
<b>Total</b>	<b>309</b>	<b>100.0</b>
<b>Occupation</b>		
Student	195	63.1
Artisan	65	21.0
Civil Servant	31	10.0
Unemployed	18	5.8
<b>Total</b>	<b>309</b>	<b>100.0</b>



Table 2 revealed that 74(23.9%) were aged 15 to 24 years, 91(29.4%) were aged 24 to 34 years, 106(34.3%) were aged 35 to 44 years and 38(12.3%) were aged 44 years and above. It was further revealed that majority of the respondents 155(50.2%) were female, while 154(49.8%) were male. It was further revealed that majority of the respondents 151(48.9%) were single, 90(29.1%) were married, 53(17.2%) were separated, while minority 15(4.9%) were widowed. The table further revealed that a significant number of respondents 119(38.5%) were Bachelor

degree, 94(30.4%) has SSCE, 58(18.8%) has OND, 34(11.0%) had master degree while not too significant 4(1.3%) had PhD. It was also indicated from the table that majority of the respondents 195(63.1%) were students, 65(21.0%) were artisans, 31(10.0%) were civil servant while minority 18(5.8%) were not employed.

### Research question 1:

What are the available repackaged information resources in public libraries in Lagos, Nigeria?

**Table 3. Mean rating of available repackaged information resources in public libraries in Lagos Nigeria.**

ITEM	VRA		RA		A		NA		Mean	S.D
	Freq	%	Freq	%	Freq	%	Freq	%		
Translated library information resources	7	38.9	4	22.2	4	22.2	3	16.7	2.83	1.150
Publicity Materials	8	44.4	8	44.4	2	11.1	0	0	3.33	.685
Audio Visual resources on local festival, event, indigenous knowledge etc.	6	33.3	4	22.2	6	33.3	2	11.1	2.77	1.060
Transliterated material (Audio recording to reading materials)	7	38.9	2	11.1	5	27.8	4	22.2	2.66	1.236
Video Recording	5	27.8	2	11.1	6	33.3	5	27.8	2.38	1.195
Compiled directories, government policy, inventories etc.	7	38.9	7	38.9	2	11.1	2	11.1	3.05	.998
Library users guide	7	38.9	7	38.9	2	11.1	2	11.1	3.05	.998
Data Compilation and Processing	6	33.3	8	44.4	0	0	4	22.2	2.88	1.131
Excerpts from books, movie or audio recordings	6	33.3	2	11.1	4	22.2	6	33.3	2.44	1.293
Extracts from books, movie or audio recordings	4	22.2	3	16.7	2	11.1	9	50.0	2.11	1.278
Analysed and consolidated information resources	4	22.2	3	16.7	7	38.9	4	22.2	2.38	1.092
Bibliographies	5	27.8	6	33.3	5	27.8	2	11.1	2.77	1.003
Selective Dissemination of Information	5	27.8	6	33.3	4	22.2	3	16.7	2.72	1.074
Abstract	6	33.3	3	16.7	3	16.7	6	33.3	2.50	1.294

Key: VRA=Very Readily Available, RA=Readily Available, A= Available, NA= Not Available

Findings from table 3 revealed availability of repackaged information resources, it was revealed that translated library information resources were available with (mean=2.83, S.D=1.15); publicity material (mean=3.33, S.D=.685), audio visual resources on local festival, event, indigenous knowledge with

(mean =2.77, s.d=1.06) were available. It was also revealed that transliterated material (audio recording to reading materials) were also available with (mean=2.66, s.d=1.236); bibliographies with (mean=2.77, s.d=1.003) were available in the public libraries; selective dissemination of Information were also

available in the public libraries with (mean=2.72, s.d=1.074); abstracts were also available with (mean=2.50, s.d=1.294). Findings also shown that compiled directories, government policy and inventories were available in the library with (mean=3.05, s.d=.998); library users guide also available in the library with (mean=3.05, s.d=.988); data compilation and processing is available in the library with (mean=2.88, s.d=2.88). However, video recording with (mean=2.38, s.d=1.195) were not really available; excerpt from books, movies or audio recordings were not available in the libraries with (mean=2.44, s.d=1.29); extract from books, movie or audio recordings were not available in the library with (mean=2.11, s.d=1.278); analysed and consolidated information resources were not available in the libraries with (mean=2.38, s.d=1.092). This therefore implies that translated library information resources,

library publicity material, audio visual resources on local festival, event, indigenous knowledge, transliterated material (audio recording to reading materials), compiled directories, government policy and inventories library users guide, data compilation and processing, bibliographies, selective dissemination of Information and abstracts were the available repackaged information resources in the public libraries. however, video recording, excerpt from books, movies or audio recordings, extract from books, movie or audio recordings, analysed and consolidated information resources were not readily available in the public libraries.

**Research question 2**

What are the various information repackaging strategies available in the selected public libraries?

**Table 4. Mean rating of information repackaging strategies employed in in public libraries in Lagos, Nigeria.**

Items	SA		A		D		SD		Mean	S.D
	Freq	%	Freq	%	Freq	%	Freq	%		
Translation of information resources	2	11.1	6	33.3	3	16.7	7	38.9	2.16	1.098
Selective Dissemination of Information	4	22.2	7	38.9	5	27.8	2	11.1	2.72	.958
Audio repackaging of information	1	5.6	2	11.1	7	38.9	8	44.4	1.77	.878
Video repackaging of information resources	2	11.1	4	22.2	3	16.7	9	50.0	1.94	1.109
Abstracting of information resources	6	33.3	4	22.2	6	33.3	2	11.1	2.77	1.060
Government data Compilation and processing for users need	8	44.4	4	22.2	3	16.7	3	16.7	2.94	1.161
Newspaper cutting and indexing	7	38.9	5	27.8	2	11.1	4	22.2	2.83	1.200
Transliteration of information resources	2	11.1	3	16.7	6	33.3	7	38.9	2.00	1.028
Drama	0	0	2	11.1	6	33.3	10	55.6	1.55	.704
Storytelling	6	33.3	1	5.6	1	5.6	10	55.6	2.16	1.424
Current Awareness information service	11	61.1	5	27.8	1	5.6	1	5.6	3.44	.855
Compilation of bibliographies	9	50.0	3	16.7	0	0	6	33.3	2.83	1.382

Key: SA= Strongly Agree, A= Agree, SD=Strongly Disagree, D=Disagree

Table 4 revealed findings on information repackaging strategies available in the public libraries. It was revealed from the findings that public libraries use selective dissemination of information as information repackaging strategy with (mean=2.72, s.d=.958); public libraries engaged in abstracting and of information resources with a mean score (mean=2.77, s.d=1.06); public libraries also engaged in government data compilation and processing for users need with mean score (mean=2.94, s.d=1.16); public libraries also engaged in newspaper cutting and indexing with (mean=2.83, s.d=1.200); current awareness information services were some of the strategies adopted for information repackaging the public libraries with mean score (mean=3.44, s.d=.855) and compilation of bibliographies with critical mean value (mean=2.88, s.d=1.382). Findings however revealed that public libraries do not engage in

translation of information resources with mean value (mean=2.16, s.d=1.098); public library do not engage in audio repackaging of information resources with (mean=1.77, s.d=.878); public library do not engage in video repackaging as a strategy for information repackaging with a mean score (mean=1.94, s.d=1.10); public libraries do not engaged in the transliteration of information resources with (mean=2.00, s.d=1.028); drama presentation with (mean=1.55, s.d=.704) was not also used as a strategy for information repackaging in public libraries; public libraries do not also engaged in storytelling as a strategy for repackaging information with (mean=2.16, s.d=1.424).

**Research question 3**

What is the frequency of use of repackaged information resources in public libraries in Lagos, Nigeria?

*Table 5. Frequency of use of repackaged information resources in public libraries in Lagos, Nigeria*

	Daily		Weekly		Monthly		Quarterly		Annually		Never	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
I make use of library current awareness services	66	21.4	81	26.2	39	12.6	67	21.7	12	3.9	44	14.2
I make use of repackaged abstract in the library	48	15.5	93	30.1	43	13.9	27	8.7	12	3.9	86	27.8
Audio tape & CD	16	5.2	5	1.6	40	12.9	14	4.5	4	1.3	230	74.4
Translation services	10	3.2	39	12.6	30	9.7	16	5.2	10	3.2	204	66.0
Selective Dissemination of Information	34	11.0	123	39.8	37	12.0	13	4.2	14	4.5	88	28.5
Information Literacy Education	38	12.3	98	31.7	45	14.6	6	1.9	22	7.1	100	32.4
Bibliographic Compilation	10	3.2	85	27.5	49	15.9	37	12.0	10	3.2	118	38.2
Photocopying	66	21.4	46	14.9	59	19.1	22	7.1	14	4.5	102	33.0
Indexing and Abstracting	0	0	12	3.9	0	0	0	0	12	3.9	285	92.2

Table 5 revealed the frequency of use of repackaged information resources in public libraries. It was revealed from the table that majority of the respondents 81(26.2%) made

use of current awareness services of the library weekly, 66(21.4%) of the respondents made use of the current awareness services daily, 39(12.6%) made use of current awareness

services on monthly basis, 67(21.7%) of the respondents made use of current awareness services on quarterly basis, 12(3.9%) made use of current awareness services annually, while 44(14.2%) of the respondents never made use of current awareness services of the library. It was shown from the findings that 10(3.2%) of the respondents made use of translation service daily, 39(12.6%) made use of translation service weekly, 30(9.7%) made use of translation service quarterly, 10(3.2%) made use of translation service annually, while majority 204(66.0%) has never made use of translation service in the public libraries. It was also revealed from the findings that 34(11.0%) made use of public libraries selective dissemination of information daily, 123(39.8%) significant percentage made use of public libraries selective dissemination of information weekly, 37(12.0%) made use of public libraries selective dissemination of information monthly, 13(4.2%) made use of public libraries selective dissemination of information quarterly, 14(4.5%) made use of public libraries selective dissemination of information annually, while 88(28.5%) has never made use of public libraries selective

dissemination of information. It was further revealed from the findings that 52(16.8%) of the respondents made use of current awareness services on daily basis, 53(17.2%) made use of current awareness services weekly, 73(23.6%), 61(19.7%) and 10(3.2%) made use of current awareness services monthly, quarterly and annually respectively, while 60(19.4%) has never made use of current awareness services. The findings from the table also revealed that 38(12.3%) of respondents made use of public libraries information literacy education daily, 98(31.7%) made use of public libraries information literacy education weekly, 45(14.6%), 6(1.9%) and 22(7.1%) made use of public libraries information literacy education on monthly, quarterly and annual basis, while majority 100(32.4%) has never made use of public libraries information literacy education. It was also revealed from the findings that 66(21.4%), 46(14.9%), 59(19.1%), 22(7.1%), and 14(4.5%) has made use of public libraries photocopying service daily, weekly, monthly, quarterly and annually respectively, while 102(33.0%) has never made use of public libraries photocopying service.

### Test of hypotheses

**Table 6. Correlations matrix showing the relationships between information repackaging on use of public libraries in Lagos, Nigeria**

	Variables	X	S.D	1	2
1.	Frequency of Use	48.05	13.81	1.000	
2.	Information Repackaging	36.99	7.22	.429**	1.000

**Hypothesis 1:** There is no significant relationship between information repackaging and use of public libraries in Lagos, Nigeria

Table 6 shows that there is a positive correlation between information repackaging and use of public libraries information resource stood at ( $r=.429$ ,  $N=309$ ,  $p<0.05$ ). This implied that there is a significant relationship between information repackaging and use of public libraries in Lagos Nigeria. Therefore, the null hypothesis is rejected.

### Discussion of findings

Findings from the research question one showed the availability of repackaged information resources. Available repackaged information resources in the public libraries

includes translated library information resources, library publicity material, audio visual resources on local festival, event, indigenous knowledge, transliterated material (audio recording to reading materials), bibliographies, selective dissemination of Information, abstracts and compiled directories, government policy and inventories. Other repackaged information resources available includes library users guide, data compilation and processing. The findings however revealed that video recordings, excerpt from books, movies or audio recordings, extract from books, movie or audio recordings, analysed and consolidated information resources were not always



available in the public libraries in Lagos Nigeria. The applications of information availability have contributed greatly to the knowledge of library functions, the availability of library resources provide overall benefit for users to postulate or reflect the general objectives for which it is established to serve, (Nwachukwu, Abdulsalami and Paulina, 2014). Nwachukwu, Abdulsalami and Paulina (2014) further stated that available resources include book and non-book materials such as: books, charts, maps, magazines, journals, symposium, graphic materials, computer systems, projectors, microfiber readers, and audio cassette, radio TV Devices, CD, Internet facilities etc. However, the findings of this research is in consonance with the International Federation of Library Association (IFLA) set the minimum standards for information resources, facilities and services to be provided by public libraries (IFLA, 2001). The information resources include fiction books, non-fiction books, textbooks, newspaper/magazines, pictures and posters, records and tapes, audio and video, toys, CD-ROM and Braille materials. Facilities to be provided include reading tables adequate enough for users, sitting chairs, book shelves, library space, fans, lighting, ventilation, flooring, restaurant, location of exit point, notice board/bulletin, photocopiers, vehicle parking space, computers, carrels, periodical racks, circulation desks and other facilities that would make users comfortable for reading (IFLA, 2001). While the services include community information services, recreational activities, reference services, storytelling, reading competition, career information, customer care, adult literacy education, mobile library services, and services to prisoners, online internet search, among others (IFLA, 2001). Also, since public libraries unlike other types of libraries is not restricted to any group of users and more or less a universal library. It is expected to serve all kinds of people including young children and people with disabilities and even people who for one reason or the other are incapacitated. Therefore information resources of the libraries should cater for varying category of

user. Olowu (2004), also in his submission stated that library and information resources include such materials as books, periodicals and audio visual materials that were provided for use by the people. This included published information resources such as books, journals, magazines and newspapers, while the unpublished materials included project, thesis, conference papers, workshop papers and seminar papers

The research findings from research question two indicated the frequency at which information resources were being used by the users of the public libraries. Findings revealed that majority of the respondents make use of current awareness services, repackaged abstract, selective dissemination of information, audio tape, audio CD, photocopying almost on weekly. It was also revealed that majority of the respondents had never made use of translated material, transliterated material, information literacy service, bibliographic compilation and indexing and abstracting. The frequency at which each of the repackaged information resources are used varies from users to users. This was indicated from the findings that shows that users uses repackaged information resources daily, weekly, monthly, quarterly and annually. Some information resources were not usually used at all by some category of users, since users of public libraries are of varying need. However, (Tommy, 2009) opined that user who does not appreciate the value of library is handicapped and visits the library to read only. Findings from this research is however in contrast to the findings of Obinyan, Aidenojie & Obinyan (2011) in there study which revealed that retirees and government workers use the libraries mainly to read newspapers and magazines and that users used the libraries also for their class assignments and current affairs matter. Obinyan, Aidenojie & Obinyan (2011) further revealed that the majority of the users do not use the materials held in the libraries but use the libraries primarily as a place for study, because libraries are quieter and more spacious than their homes. This is in line with the findings of the International Network for

the Availability of Scientific Publications (INASP, 2000).

Result further revealed that information repackaging strategies is in use in the public libraries. It was revealed from the findings that public libraries use selective dissemination of information, engaged in abstracting of information resources, compilation of government data and processing for users need, newspaper cutting and indexing and current awareness information services. On the other hand, it was revealed that public libraries do not engage in translation of information resources, audio repackaging of information resources, video repackaging, transliteration of information resources, drama presentation and storytelling. The result from this findings is in line with the submission of Dongardive (2014) who opined that In the process of designing the repackaging, it is essential to have specific information about the target audience to collect, process and apply the required information and design and repackage of information according to user demands. He therefore listed that Current Awareness Services (CAS), Selective Dissemination of Information (SDI), bibliography, analysis and consolidation of Information, excerpts and extracts, data compilation and processing, translation of materials, audio visual materials and transliteration of information materials are some of the strategies for information repackaging in the public libraries. Findings from this hypothesis showed that there is a positive correlation between information repackaging and use of public libraries with ( $r=.429$ ,  $N=309$ ,  $p<0.05$ ). This implied that there was a significant relationship between information repackaging and use of public libraries in Lagos Nigeria and information repackaging influences use positively. Therefore the null hypothesis was rejected. This indicated that information repackaging has significant influence on use of public libraries. This finding therefore corroborates the opinion of (Dongardive, 2013) who posited that Information has become one of the most important resources in contemporary society which is especially true for business and commercial ventures. Businesses create

markets for their products and services through innovation, quality management, improved customer service, strategic planning and a host of other approaches and techniques. These value added components would include but are not limited to information analysis, synthesis, editing, translating and transforming its symbolic and media formats. IR also ensures the currency, accuracy, pertinence, comprehensiveness, ease of comprehension (e.g. technical level, presentation style); and convenience of use (e.g. timing, format of coding) and therefore influence users decision to make use of libraries.

Hence, library users have significantly felt the impact of information repackaging in the public libraries. Information repackaging has availed users' the opportunity to have required information resources handy as and when the need for such information resources aroused. Prospective users now contact librarian to help them repackage information in a way that would save users time and with expected level of information need. On a final note, public libraries have stepped up their activities in terms of Information Repackaging because they now provide timely information resources to prospective user in the most appropriate format. Therefore, information repackaging have greatly impacted users experience in the use of public library information resources in the format that best suits their purpose. Also, public now create more access to their prospective users in a timely and useful manner.

It is from the forgoing that this study shows that users in public were able to effectively engaged themselves with the repackaged information resources in the public libraries. Users can now get information resources in format and size which

### Conclusion

For information to be meaningful, useful and valuable there must be surrounding conditions that make it appreciable. When particular information gets out of its environment, it may become useless to the other environment. The environment may be

human or geographic, therefore the need to repackage information to suite the purpose of each environment because the environment affects information presentation and assimilation. Information repackaging is a way of improving public libraries services and ensures effective and adequate use of the provisions of public libraries information resources in a way that best satisfy users information need, most especially in this era of electronic and online information resources. Librarians at the public libraries must give critical thought to this phenomenon with the intent of implementing it effectively to promote use of public libraries. Library and information managers need to realize that these technologies are broadening the market and therefore provide immense opportunities to them to offer services and products at the global level. To effectively reach this broadened group of potential users, it becomes imperative that positive attitudes toward information repackaging be part of the organizational culture of public libraries.

### Recommendations

Based on the findings of the study, the following recommendations were made:

1. Public libraries in Lagos State should make available in its collection repackaged information resources for their prospective users from time to time, which should include translation of information resources, transliteration service, audio and video recording of information resources, compilation of bibliographies, excerpt and extract from books, movies or audio recordings etc.
2. Public libraries should encourage frequent and effective use of repackaged information resources by users in public libraries in Lagos State to boost users' confidence in the public libraries on the provision of useful and desired information resources when required.
3. Lagos State public libraries should adopt various strategies to market their information repackaged information resources such as display of newly repackaged information, users' education, book exhibition and review, research and users' analysis, seminars, mobile library

initiative, information product and services evaluation, public relation, social media, newsletter and email marketing etc.

4. Public libraries should start thinking of plans or modalities to carry out research on patron survey, seeking information regarding the library's communication, service quality, facilities, resources and equipment, service delivery and library staff. These will offer guidance in providing better service and improved library collection.

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## Teachers' Self-Efficacy as A Correlate of Knowledge of Social Studies among Lower Basic School Pupils in Ekiti State

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### Abstract

*The study determined the pattern of self-efficacy among Social Studies teachers in Ekiti State. It equally assessed the relationship between Social Studies teachers Self-efficacy and lower basic school pupils' knowledge of Social Studies and finally determined the correlation between Social Studies teachers' self-efficacy and lower basic school pupils' knowledge of Social Studies in the state. The study employed correlational research design. The population comprised the Social Studies teachers and lower basic school pupils in Ekiti State. The sample size consisted of 200 Social Studies teachers and 1,000 pupils selected using a multistage sampling procedure. Two instruments were used to collect data for the study namely; Teacher Self-efficacy Scale (TSS) and Social Studies Achievement Test (SSAT). The TSS is a four Likert type scale graded from 1 to 4 respectively and scored accordingly. It expressed the four domains of Self-efficacy namely: job accomplishment, skill development, social interactions, and coping with job stress. The SSAT on the other hand is also a ten-item questionnaire constructed by the researcher to assess pupils' knowledge on the topic. The options were rated as Yes or No. A 'no' response was scored 0 and a 'yes' response scored 1. The total score was added and graded on a scale of 10. All the items on the instrument were subjected to the Lawshe's Content Validity Ratio (CVR) test. The Lawshe's validity test on item by item yielded a validity coefficient of 0.73 for SSAT and 0.87 for TSS thus; indicating very good validity. A split-half reliability technique was carried out on 30 subjects using Spearman-Brown Prophecy Formula for the reliability analysis. The result obtained was 0.66 for SSAT and 0.74 for TSS. Data collected were analysed and expressed in proportions, linear regression and correlational analyses. The results showed that there is significant relationship between teachers' self-efficacy and pupils' knowledge of Social Studies ( $f=305.6$   $df=4$ ;  $1195$ ;  $p<0.05$ ). The correlational analysis also showed that all four components of teachers' self-efficacy significantly correlate with pupils' knowledge: job accomplishment ( $r=0.791$ ,  $p<0.05$ ), skill development ( $r=0.722$ ,  $p<0.05$ ), social interaction ( $r=0.803$ ,  $p<0.05$ ), and coping with stress ( $r=0.570$ ,  $p<0.05$ ). The study concluded that teacher self-efficacy positively correlates with pupils' knowledge of Social Studies among the study population. The implication is that stakeholders in education who desires to improve pupils' knowledge of Social Studies need to improve teachers' self-efficacy.*

**Key words:** Teachers' Self-efficacy, Pupils' Knowledge, Social Studies

### Introduction

Social Studies as a school subject has occupied an important position in the school curriculum and has been recognised as an effective tool for citizenship education in Nigeria, (Umudjere, Okogun and Osah, 2016). Hence, its study in elementary schools helps young pupils develop critical thinking and problem solving skills, improve their

adaptability to the environment thus helping them to cope with the challenges of living in a world with multiple cultures and ideologies; hence its teaching.

The effect of teaching Social Studies in schools like any other educational endeavour can be assessed in terms of the learning outcomes thus produced. Learning outcomes

is a set of measureable knowledge, skills and attitudinal changes which a student should be able to demonstrate as a result of being part of a teaching session. Mahajan and Singh (2017) defined learning outcomes as the guiding tools which guide the learners to the desired results of the planned course. While learning outcomes such as the knowledge of the subject matter assess the cognitive domain, pupils' attitude measures the affective domain while the acquired skill sequel to their learning measures the psychomotor domain of learning. Knowledge is the outcome of interest in this study because it is readily measureable in the short term.

The relationship between teachers' variables and students' learning outcomes has long being a subject of intellectual discusses. Wright, Horn and Sanders (2017), in their study concluded that the most important factor influencing student learning is the teacher. Teachers stand in the interface of the transmission of knowledge, values and skills in the learning process. Teachers are therefore considered as the most important factor affecting students' learning achievement (Sass, Hannaway, Xu, Figo and Feng 2010). For example, Adeyemi in 2008 reported a significant relationship between teaching experience and student achievement. Similarly, Daso (2013) and Ewetan (2012) had also alluded to this positive association between teachers' years of experience and pupils' learning outcome in different study populations. Yala and Wanjohi (2011) and Adeyemi (2010) attested to a similar positive correlation between teachers' educational qualifications and students' academic achievement. However, such positive relationship was not sustained in other research findings as reported by Yara and Surumo (2012) in a study among Kenyan as well as by Ayodele and Ige (2012) in a descriptive survey of a similar student population in Ondo state, south-west Nigeria. The relationship between teachers self-efficacy and pupils' knowledge is not exempted from such equivocality in the available body of evidence. According to Skaalvik and Skaalvik, (2010), Teacher self-efficacy could be conceptualised as 'individual teachers' beliefs in their own ability to plan,

organise, and carry out activities that are required to attain given educational goals'. It is the belief in a teachers' capabilities to organise and execute the courses of action required to produce given educational attainments. Teachers with high Self-efficacy are therefore known to be open to new methods of teaching, use more humanistic and positive strategies to deal with student problems (Guskey, 2018). Shahzad and Naureen (2019) reported a strong correlation between Teachers' Self-efficacy and achievements of secondary school students in English Language. Similar outcome was reported by Durowoju and Onuka (2015) in Economics among similar study population. However, Gordon and Debus (2002) reported a significantly- negative correlation between Teachers' self-efficacy and students' approach to learning and thus their knowledge. There appears to be paucity of studies done among lower basic school pupils.

#### **Statement of Problem**

Studies have evaluated the relationship between several teachers' variables and students learning outcomes yielding equivocal results and even fewer studies accessing the relationship between Teachers' Self-efficacy and Pupils' Knowledge especially among pupils in their early childhood. This study is therefore designed to add to the available body of knowledge on the correlation between these unique variables of Teachers' Self-efficacy and Pupils' Knowledge in the learning process of Social Studies among pupils of lower basic schools in Ekiti State.

#### **Research Objectives**

The specific objectives of the study are to:

- (a) determine the pattern of Self-Efficacy among Teachers of Social Studies in Ekiti State;
- (b) assess the relationship between Teacher Self-efficacy and lower basic school Pupils' Knowledge of Social Studies in Ekiti State; and
- (c) determine the correlation between Teachers' Self-efficacy and lower basic school Pupils' knowledge of Social Studies in Ekiti State.

#### **Research Question**

The research question below was raised to guide the study:

What is the pattern of self-efficacy among Social Studies’ teachers in Ekiti State?

**Hypotheses**

The following hypotheses were formulated to guide the study:

**H01.** There is no significant relationship between Teachers’ self-efficacy and pupils’ knowledge of Social Studies among lower basic school pupils in Ekiti State.

**H02.** There is no significant correlation between Teachers’ Self-efficacy and Pupils’ Knowledge of Social Studies among lower basic school pupils in Ekiti State.

**Methodology**

The study employed correlational design of cross sectional type. The population of the study comprised the Social Studies teachers in lower basic schools III in Ekiti State. The sample comprised 200 teachers and 1,000 pupils. Multistage sampling procedure was employed. Out of the 16 Local government areas in Ekiti State, five local government areas were selected using simple random sampling technique. Twenty primary schools with at least two arms of primary III were purposively selected in each of the five local government areas and five pupils were selected in each arm of the class using simple random sampling technique. Teachers of Social Studies in each of the two arms of primary III class were equally selected using purposive sampling technique. Two instruments were used to collect data for the study namely; The Teacher Self-efficacy Scale (TSS) and The Social Studies Achievement Test (SSAT).

The TSS is a ten-item questionnaire adopted from Schwarzer, Schmitz and Daytner’s (1999). It is a four Likert type scale were graded from 1 to 4 respectively and scored

accordingly. It expressed the four domains of Self-efficacy namely: job accomplishment, skill development, social interactions, and coping with job stress. The SSAT on the other hand is also a ten-item questionnaire constructed by the researcher to assess pupils’ knowledge on the topic ‘the family’ which is a topic in Social Studies confirmed to have been taught the interviewed pupils. The options were rated as Yes or No. A ‘no’ response was scored 0 and a ‘yes’ response scored 1. The total score was added and graded on a scale of 10. All the items on the instrument were subjected to the Lawshe’s Content Validity Ratio (CVR) test. The Lawshe’s validity test on item by item yielded a validity coefficient of 0.73 for SSAT and 0.87 for TSS thus; indicating very good validity. A split-halve reliability technique was carried out on 30 subjects using Spearman-Brown Prophecy Formula for the reliability analysis. The result obtained was 0.66 for SSAT and 0.74 for TSS. This result imply that the instrument is reliable and therefore, suitable for the study. Data collected were analysed using simple percentage, multiple regression analysis.

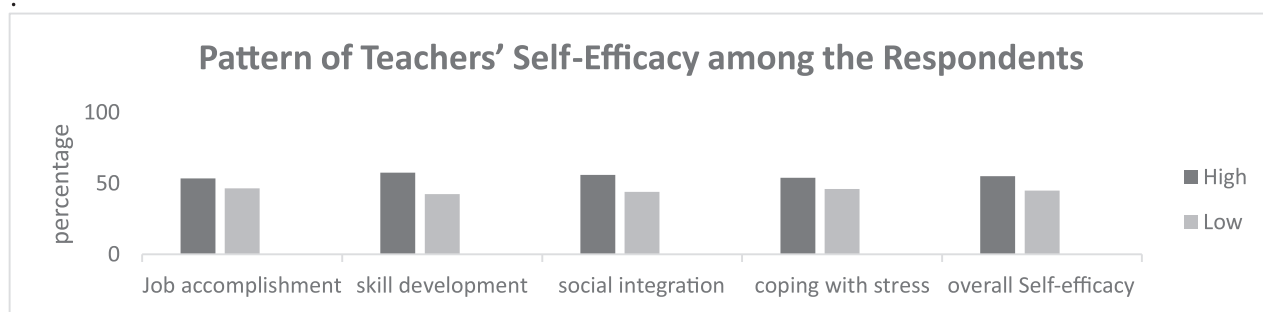
**Results**

**Research Question**

What is the pattern of self-efficacy among Social Studies’ teachers in Ekiti State?

Figure 1 shows the proportion of teachers with low scores as compared to high scores in the different domains of self-efficacy.

Higher proportions of respondents had high scores in all domains of teachers’ self-efficacy namely; Job accomplishment (53.5%), skill development (57.5%), social integration (56.0%) and coping with stress (54%). Consequently, 55% of respondents have high teachers’ self-efficacy.



**Figure 1: Pattern of Teachers’ Self-Efficacy among the Respondents.**

**Hypotheses**



**H<sub>01</sub>.** There is no significant relationship between Teachers’ self-efficacy and pupils’ knowledge of Social Studies among lower basic school pupils in Ekiti State.

**Table 1:** Summary of Regression Analysis Showing the Relationship between Teacher Self-efficacy and Pupil’s Knowledge.

R	R-squared	Adjusted R-Squared	Std.Error of the Estimate
0.847	0.673	0.718	1.607

**Table 2:** Summary Regression ANOVA Showing the Relationship between Teacher Self-efficacy and Pupil’s Knowledge.

	Sum of Square	Df	Mean Square	F	P	Remark
Regression	6364.1	4	1591.01	305.6	0.000	Sig
Residual	3086.7	1195	2.58			
Total	9450.8	1199	7.88			

**Table 3:** Linear Regression Showing the Relationship between the Components of Teacher Self-efficacy and Pupil’s Knowledge.

	Unstandardized Coefficients		Standardized Coefficients		P	Remarks
	β	Std. Error	Beta	T		
Constant	4.252	0.270		-15.72	0.000	Sig
Job accomplishment	0.807	0.082	0.410	9.74	0.000	Sig
Skill development	0.061	0.052	0.044	1.17	0.004	Sig
Social interaction	0.305	0.026	0.505	11.52	0.000	Sig
Coping with stress	0.086	0.049	0.044	1.73	0.048	Sig

Tables 1, 2 and 3 describe the relationship between teachers’ self-efficacy and pupils’ knowledge. Tables 1a and 1b are the summary of regression analyses showing the combined prediction of students’ knowledge in social studies by the teachers’ self-efficacy while table 1c illustrates the relative contribution of each component of teachers’ self-efficacy to the pupils’ knowledge.

Table 1 shows a coefficient of multiple correlation (R) of 0.847 and a multiple adjusted R-squared of 0.718. This means that 71.8% of the variance in the pupil’s knowledge is accounted for by all four components of teachers’ self-efficacy when taken together.

Table 2 shows that the joint contribution of teachers’ self-efficacy to the pupils’ knowledge of social studies was significant (F=305.6, df= 4; 1195: p<0.05).

Table 3 expressed the relative contributions of the four components of teachers’ self-efficacy to the

pupils’ knowledge of social studies in terms of beta weights. These showed that the pupils’ knowledge is determined by positive reinforcement from all the four components of teachers’ self-efficacy individually as evidenced by their positive unstandardized Beta values. The regression beta coefficient showed that the teachers’ job accomplishment made the most significant relative contribution to the prediction of pupils’ knowledge of social studies (B=0.807, t=9.74, p<0.05); followed by teacher’s social interaction (B=0.305, t=11.52, p<0.05); teacher’s ability to cope with stress (B=0.086, t=1.73, p<0.05) and then teacher’s skill development (B=0.061, t=1.17, p<0.05).

**H<sub>02</sub>.** There is no significant correlation between Teachers’ Self-efficacy and Pupils’ Knowledge of Social Studies among lower basic school pupils in Ekiti State.

**Table 4:** Correlation matrix showing Teachers’ Self-efficacy and Pupils’ Knowledge of Social Studies among lower basic school pupils’ in Ekiti State

Knowledge	1.000				
Job accomplishment	0.791**	1.000			
Skill development	0.722**	0.853**	1.000		
Social integration	0.803**	0.894**	0.886**	1.000	
Coping stress	0.570**	0.749**	0.702**	0.669**	1.000

\*\* Correlation significant at 0.05



Table 4 illustrates the correlation between teachers' self-efficacy and pupils' knowledge in social studies. The table shows a positive and significant relationship between teachers' job accomplishment, teacher's skill development, teacher's social interaction and teacher's ability to cope with job stress, (components of self-efficacy) on pupil's knowledge of social studies. Pupils learning outcome of knowledge had significant correlation with job accomplishment ( $r = 0.791$ ,  $p < 0.05$ ), with skill development ( $r = 0.722$ ,  $p < 0.05$ ), social integration with pupil's parents ( $r = 0.803$ ,  $p < 0.05$ ), and teacher's ability to cope with stress ( $r = 0.570$ ,  $p < 0.05$ ).

### Discussion

Teacher self-efficacy of the respondents was found to be slightly above average. Similar average self-efficacy was reported by Al-Alwan and Mahasneh (2014) in a study among 679 teachers and 1,820 students in 23 Jordanian primary schools. However, Kihoro and Bunji (2017) reported high level of self-efficacy among 76% of their respondents who were pre-school teachers in Nairobi and Kiambu regions of Kenya. The possible reason for this observation is the sample population involved in the studies. This study was conducted among lower basic school teachers and so was Al-Alwan et-al study. However, the study by Kihoro et-al was conducted among pre-school teachers. Pre-school teachers are likely to have undergone training in early childhood education which could have positively impacted on their self-efficacy.

This study showed that teacher self-efficacy has a strong relationship with the pupils' knowledge of Social Studies ( $R = 0.847$  and multiple adjusted R-square of 0.718). The relationship is statistically significant both at collective and individual component levels ( $p < 0.05$ ). Similarly, correlation analysis showed that components of Teachers' self-efficacy strongly correlate with pupils' knowledge ( $r$  ranging from 0.570 to 0.803) and the correlation was significant at alpha value of 0.05. This positive association has been alluded to by previous studies. Ross, Cousins and Gadalla's (1996) reported a significant relationship between Teacher Self-efficacy and students' engagement in classes

and consequently their academic achievements.

Similarly, Tournaki and Podell (2005) reported a strong correlation between Teachers' Self-efficacy and academic achievement. In addition, Schwab, (2019) in her study found out that the higher teachers' general self-efficacy the higher also their student-specific self-efficacy. However, Gordon and Debus (2002) reported a significantly- negative correlation between Teachers' self-efficacy belief and students' approach to learning and thus their knowledge.

### Conclusion and Recommendation

Based on the findings, the study concluded that the proportion of lower basic school teachers with high self-efficacy is average. Also, there is a statistically significant relationship between Teachers' Self-efficacy and Pupils' Knowledge in this study and that all the components of Teacher Self-efficacy (Job accomplishment, skill development, social interactions and coping with stress) are positive correlates of Pupils' knowledge. It is therefore recommended that teachers should be encouraged and motivated to be highly self-efficacious for a meaningful teaching-learning exercise.

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# Parental Interest and Some Intra-Personal Factors as Predictors of Career Aspirations Among Students with Hearing Impairment in Lagos State.

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## Abstract

*This study investigated parental interest, motivation and some intra- personal factors as predictors of career aspirations among students with hearing impairment in Lagos State. The study adopted descriptive survey research design. The samples for the study were one hundred and three (103) students with hearing impairment using purposively sampling technique with some inclusive criteria to select participants from inclusive Senior Secondary School in Lagos State. The ages of the participants range between 15 and 21. The instruments for this study were parents' interest scale, motivation for occupation preference scale and career preference factor scale with reliabilities of 0.70, 0.80 and 0.78 respectively. Data collected were analyzed using descriptive statistics, Pearson product moment correlation and multiple regressions. The results revealed that parental interest and motivation positively related to career aspirations of students with hearing impairment in Lagos State while age and gender negatively related to career aspirations of the participants with hearing impairment. Also the independent variables did not jointly contributed to career aspiration of the participants but parental interest contributed mostly. It is recommended that parents should be encouraged to guide their children towards choosing a career that will be beneficial and relate to their children's potentials.*

**Keywords:** Parental interest, Motivation, Age, Gender, Career aspirations, Students with hearing impairment

## Background to the Study

Living meaningful life is dependent on meeting basic life needs which is predicated on the economic status and environmental factors of such individuals. This is the reason why individual spends time to acquire specific skills through education and training. Having education or acquiring skills are not the end of it all but having the productive education and possessing the right skills that manifest in economic gains matter to individual's career aspirations. However, in the process of acquiring education and skills, young adults are confronted with problem of choice because of a number of factors ranging

from personal-social to environmental dictate. Nevertheless, career preparation is an important precursor for successful career development across the lifespan and this ultimately determine life success.

Two types of factors that are environmental and personal influences aspirations. In early childhood, before the child is old enough to know what his abilities, interests and values are, his aspirations are largely shaped by his environment. As he grows older and is more aware of his abilities and interests, personal factors have a greater influence, but many of his aspirations, his values, for example, are still environmental in nature. Several studies

revealed that students either with hearing impairment or without hearing impairment all over the world are usually faced with a dilemma in making a career choice decision in their lives (Bandura A, Barbaranelli, Caprara & Pastorelli, 2001; Issa & Nwalo 2008; Watson, McMahon, Foxcroft & Els, 2010). In most cases, the choice of careers and subsequent career paths in future are a nightmare for many students. This dilemma is often compounded by so many factors such as home influence (parents' involvement), peer pressure, societal demands emanating from economic, social and technological innovation as well as internal motivation. Mung'ara (2012) noted that factors such as parental level of education, home environment factors, motivation to learn, discipline and academic performance could have an impact on their career aspirations. The case of young adults with hearing impairment is even compounded by the fact that they lack auditory stimulation that deprive them from early social orientation, delay admission to school and lack of vital information as regard career prospect from peers and society.

Various theories have emphasised the influence of parents on their children's career development. For instance, Social Cognitive Career Theory by Lent, Brown, and Hackett (1994) explained how the bi-directional interaction of personal-cognitive variables (e.g., self-efficacy, outcome expectation, and goals), external environmental factors (e.g., parental support and barriers), and overt behaviors (e.g., career decision) can either promote or impede career development processes (i.e., interests, choice, and performance). In essence, since parents are significant figures in the life of their children, there is no gainsaying that their influence will also be significant in career prospect of their children most importantly parents of children with hearing impairment. Other developmental theories, such as the ecological approach by Bronfenbrenner (1979) and developmental contextualism by Vondracek, Lerner, and Schulenberg (1986) have considered family in which parents are key figures to be a crucial contextual variable influencing the development of adolescents and their careers.

Findings of many studies on career aspirations of young adults support the notion that parents play a major active role in career development (Michael, Cinamon & Most, 2015). In a study by Michael, Cinamon and Most (2015) on career-related parental support of adolescents with hearing loss, the result revealed parental influence related to career aspiration of the participants. This lends credence to the importance of parents' positive guidance on matters of life and futures. Studies on parental career expectations suggest that these expectations are often facilitative and positive. Also, Massey, Gebhardt, and Garfenski (2008) reviewed 94 studies on career aspiration of young adults, reported that high parental expectations for their children were associated with high educational and career aspirations. Some other studies by Mau and Bikos (2000), and Shumba and Naong (2012) have found that students with and without hearing impairment and young adults cite parents as important influence on their choice of career. It is therefore worthy to note that parents play very important role in what a child will become in life. Hence, parents are expected to play positive role in their children career identification and aspiration.

Furthermore, the concept of motivation is another crucial factor that affects human behaviour and performance and as such can influence career aspiration of young adults of school age (Kian, Yusoff & Rajah, 2014). Studies on motivation have revealed that this concept is one of the most important factors influencing students' achievement and ensure continuous progression and willingness to confront tasks (Pintrich, 2003; Guay, Chanal, Ratelle, Marsh, Larose & Boivin, 2010; Aluçdibi & Ekici 2012; Alkış, 2015). It must be noted that without motivation, career aspiration of young adults including students with hearing impairment may be jeopardised. This is because motivation toward a particular career can encourage individuals not to give up even in the midst of difficult process. In understanding the concept of motivation, Küçüközkan (2015) defined motivation as the sum of the efforts made for mobilizing the individual towards one or more particular goals and for ensuring the continuity of this movement.



Motivation is either Intrinsic or Extrinsic motivation. Intrinsic motivation is a drive in an individual to achieve a set goal. This is independent of the drive outside the individual (Ural,2009), on the other hand, if a drive to achieve a set target lies in the surrounding environment in form of reward, punishment and social support, this is regarded as extrinsic motivation (Erdoğan, 2013). Both constructs are necessary and important for achievement and even for career aspiration. This is because a young adults especially a student with hearing impairment needs both internal drive and external supports to achieving a desire end.

Studies underlining the importance of motivation as a factor that facilitates achievements of the individuals (Wolters & Rosenthal 2000; Karagüven 2012; Kaya 2013) have argued that achievement and effectiveness may vary according to motivators such as interest, desire, aspiration and need (Tahiroğlu and Aktepe 2015). Studies also demonstrated that there is a positive relationship between intrinsic motivation and achievement (Lepper, Corpus & Iyengar, 2005; Burton, Lydon, D'Alessandro & Koestner, 2006) and also, intrinsic and extrinsic motivation should be combined together in order to motivate an individual to get into action for a goal (Barrett, Patock-Peckham, Hutchinson, & Nagoshi, 2005; Gillet, Vallerand, & Rosnet, 2009; Hayenga & Corpus 2010 ). Of course, if motivation will drive achievement, it is worthy to note that motivation will ropel aspiration (career aspiration) in the life of young adults with hearing impairment if it is well directed.

Career aspirations are also influenced by factors such as gender (Adragna, 2009; Berzin, 2010). This factor influences the norms against which students compare themselves and the context within which goals are pursued. The discrepancy between the aspirations of male and female students or young adults may be attributed to contextual factors (Massey, Gebhardt, & Garnefski, 2008). Cultural beliefs about gender bias individuals' perceptions of their competence at various career-relevant tasks and sometimes the issues of disabilities may determine career aspiration of students to the extent that

individuals act on gender-differentiated perceptions when making career decisions (Correll,2001). Some studies have demonstrated that females had higher career aspiration compared to their males' counterparts (Blackhurst & Auger, 2008; Nadeem & Khalid, 2018). Some other studies also revealed that females were interested in a significantly greater number of careers and showed greater gender-role flexibility in their career aspirations than their male counterparts (Mendez & Crawford, 2002). For instance, females are likely to aspire to attain the highest status even in male-dominated discipline (Feliciano & Rumbaut, 2005; Adragna, 2009). In contrast, males' career aspirations appeared largely unrelated to their self-perceived achievement motivation (Al-Bahrani, Allawati, Shindi & Bakkar, 2020).

Career choice is a significant issue in the developmental life of youths because it is reported to be associated with positive as well as harmful psychological, physical and socio-economic inequalities that persist well beyond the youthful age into an individual's adult life (Robertson, 2014; Bubić & Ivanišević, 2016). The complexity of career decision-making increases as age increases (Gati & Saka, 2001). This implies that the age of any student or young adult may facilitate the trend at which he appreciates and understands definite carrier prospect. As children get older, they are more likely to describe their career choice as a dynamic interplay of their developmental stages and the prevailing environmental circumstances (Howard & Walsh, 2011). Ability by authoritative adults to handle this process carefully consolidates individual identity and fosters wellbeing, job satisfaction and stability (Kunnen, 2013). This then mean ages of prospective career seekers influence the job of career and ability to be focused on the process of achieving desired goal. Study conducted by Dar (2019) reported 17.83% of adolescents have shown low career aspirations, 58.33% falls in moderate level of career aspirations. This suggests that although some adolescents maintain their aspirations and expectations for the future, for others, future oriented cognitions are not stable (Beal & Crockett, 2010). Changes occur due to some environmental variables such as social

pressures, family background, socio-economic status, access to opportunity structures, and school factors (Akos, Lambie, Milsom, & Gilbert, 2007; Gutman & Schoon, 2012; Sadolikar, 2016).

From the foregoing, variables such as age, gender, parental interest and participation, peer pressure and host of environmental factors can dictate career aspiration of young adults without hearing impairment, such factors may also be influencing factors in career choice of students with hearing impairment. Therefore, this study intends to look into parental influence, motivation and some intra-personal factors as predictors of career aspirations among students with hearing impairment in Lagos State, Nigeria,

### Research questions

1. Will there be a significant relationship between the independent variables (gender, age range, parental interest and motivation) and career aspiration among students with hearing impairment in Lagos state?
2. What is the joint influence of the independent variables (gender, age range, parental interest and motivation) on the dependent variable (career aspiration) among students with hearing impairment in Lagos state?
3. What is the relative influence of the independent variables (gender, age range, parental interest and motivation) on the dependent variable (career aspiration) among students with hearing impairment in Lagos state?

### Methodology

This study employed descriptive survey research design in which quantitative data were collected in line with the variables under investigation. The population for the study included students with hearing impairment in inclusive Secondary Schools in Lagos State, Nigeria. The samples for the study were one hundred and three (103) students with hearing impairment purposively sampled from the available inclusive Senior Secondary Schools in Lagos State. Their ages range between 15 and 21. These students with hearing impairment were believed to have started

preparing for life careers. The age, type of impairment and class level were inclusive criteria for selecting the participants. Other criteria were that the participants were available during the period of this study and indicated they were ready to participate in the study through the consent form filled by the participants. The instrument for this study was Students' occupational guiding inventory that was sub-divided into four sections. Section A consisted of the demographic data of the participants. Section B was Parents' interest scale constructed in a 4-point Likert scale, i.e. SA (Strongly agreed), A (Agreed), D (Disagreed) and SD (Strongly disagreed). Parents' interest scale was constructed by researchers with a reliability of 0.70 using Cronbach's alpha.

Motivation for occupation preference scale was adapted from Bakare's motivation for occupation preference scale (1977) calibrated in a 5-point Likert scale, i.e. NI (No input), LI (Little input), AI (Average input), CI (Considerate input) and EI (Extreme input) with a reliability coefficient of 0.80 using Cronbach's alpha. The career preference factor scale adapted from Ulla, Barman, Ja'afar and Yosoff (2013). It was constructed in a 4-point Likert scale, i.e. MLM (More like me), SLM (Sometimes like me), RLM (Rarely like me) and NLM (Not like me) with a reliability of 0.80 using Cronbach's alpha. To collect data, the researchers sought the permission of the Principals of the schools used. After the permission had been granted, the researchers met with the students and explained the essence of the study to them with the help of their class teachers. Thereafter, consent forms were given to the students and those who responded positively were asked to respond to the scales. The researchers waited patiently for the respondents to attend to the scales with explanation where necessary. The responses were collected after they had been duly attended to. Data collected were coded and analyzed using descriptive statistics, Pearson product moment correlation and multiple regressions.

### Result

#### Biographic Data of Respondents

The distribution of respondents was found across gender and age range. The distribution across gender gave that 62.1% of the

respondents were males while the remaining 37.9% were females. The male respondents were therefore in the majority. On the age range, 63.1% were between 17 and 19 years old, 32.0% were below age 16 while 4.9% were 20 years and above.

**Research Question One:** Will there be significant relationship between the independent variables (gender, age range,

parental interest and motivation) and career aspirations among students with hearing impairment in Lagos state?

**Table 1:**  
Correlation Matrix Showing Relationship between independent variables (gender, age range, parental interest and motivation) and career aspirations among students with hearing impairment in Lagos state

	Gender	Age Range	Parental Interest	Motivation	Career Aspiration
<b>Gender</b>	1.000				
	103				
<b>Age Range</b>	0.059	1.000			
	0.554				
	103	103			
<b>Parental Interest</b>	-0.011	-0.086	1.000		
	0.914	0.388			
	103	103	103		
<b>Motivation</b>	- 0.168	0.207*	0.294**	1.000	
	0.091	0.036	0.003		
	103	103	103	103	
<b>Career Aspirations</b>	-0.142	-0.064	0.141	0.133	1.000
	0.914	0.520	0.156	0.180	
	103	103	103	103	103

\*\*= correlation is significant at the 0.01 level (2-tailed)

\*= correlation is significant at the 0.05 level (2-tailed)

The results showed that the following two variables related positively but not significantly with Career aspiration: Parental interest ( $r = 0.141, p > 0.05$ ) and Motivation ( $r = 0.133, p > 0.05$ ). Also gender and age range both related negatively but not significantly with career aspirations ( $r = - 0.142, p > 0.05$  and  $r = -0.064, p > 0.05$ ). Therefore the higher the parental interest and motivation, the higher the value of their career aspirations. The relationship however are not significant.

**Research Question Two: What is the joint influence of the independent variables (gender, age range, parental interest and motivation) on dependent variable (career aspirations) among students with hearing impairment in Lagos state?**

**Table 2:**

Multiple Regression of the Independent Variables (gender, age range, parental interest and motivation) on dependent variable (career aspirations) among students with hearing impairment in Lagos state.

Parameter	Value
<b>Multiple Regression</b>	0.221 <sup>a</sup>
<b>R-Square</b>	0.049
<b>Adjusted R-Square</b>	0.010
<b>Standard Error of Estimate</b>	10.137

a. Predictors: (Constant), gender, age, parental interest and motivation.

Table 2 above presents the multiple regression of the independent variables (gender, age range, parental interest and motivation) on dependent variable (career aspirations) among students with hearing impairment in Lagos state. The multiple regression coefficient (R) showing the linear relationship between the four independent variables (gender, age range, parental interest and motivation) on dependent

variable (career aspiration) among students with hearing impairment in Lagos state is 0.221. The adjusted R square value is 0.010; this implies that the variation in career aspiration accounted for by the stated independent variables (gender, age, parental interest and motivation) when combined, among students with hearing impairment is 1.0 %.

**Table 3**  
Multiple Regression ANOVA for Career aspirations.

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	519.180	4	129.795	1.263	0.290 <sup>b</sup>
Residue	10070.742	98	102.763		
Total	10589.922	102			

- a. Predictors: (Constant), gender, age, parental interest and motivation
- b. Dependent variable: Career Aspiration

Table 3 above shows the Multiple Regression ANOVA of the identified independent variables (gender, age, parental interest and motivation). Further verification using multiple regression ANOVA produced F-ratio = 1.263,  $p > 0.05$ . This implies that there is no significant linear relationship between the identified independent variables (gender, age, parental interest and motivation) and career aspirations. This implies that, the joint contribution of the independent variables to career aspiration is not statistically significant; it is only limited to the sample of the study

and so cannot be generalised to the entire population of the study.

**Research Question Three:** What is the relative influence of the independent variables (gender, age range, parental interest and motivation) on dependent variable (career aspirations) among students with hearing impairment in Lagos state?

**Table 4**  
Coefficients Indicating Relative Effects of the identified independent variables (gender, age, parental interest and motivation) and dependent variable (career aspirations) among students with hearing impairment?.

Model	Unstandardized Coefficients		Standardized Coefficient Beta	T	Sig.	Remark
	B	Std. error				
Constant	35.758	12.275		2.913	0.004	S
Gender	-2.518	2.102	-0.120	-1.196	0.234	NS
Age range	-1.264	1.914	-0.068	-0.661	0.510	NS
Parental Interest	0.220	0.218	0.105	1.009	0.315	NS
Motivation	0.218	0.245	0.096	0.886	0.378	NS

- a. Dependent variable: Career Aspirations
- S: significant at 0.05 alpha levels
- N.S: Not Significant at 0.05 alpha levels

Table 4 above shows the relative effects of the identified independent variables (gender, age,

parental interest and motivation) on dependent variable (career aspirations) among students



with hearing impairment as indicated by standardized Beta (B) weights. Parental Interest contributed most and directly but not significantly to Career Aspiration ( $B= 0.220$ ;  $t = 1.009$ ;  $p > 0.05$ ). The contributions of motivation ( $r = 0.218$ ,  $p > 0.05$ ) is also positive but not significant. The contribution of gender is negative and not significant ( $r = -2.518$ ,  $p > 0.05$ ). The contribution of age range to career aspirations is also negative and not significant ( $r = -1.264$ ,  $p > 0.05$ ). None of the contributions of the four independent variables is significant, therefore they are not generalizable. Therefore the contributions noticed is limited to the sample of the study alone.

### Discussion

The results revealed that parental interest and motivation positively related (though not statistically significant) to career aspirations of students with hearing impairment in Lagos State. This implies that, based on the sample of this study, role of parents on child's development is unquantifiable especially during career selection period among adolescents and young adults. This finding corroborated the result of a study carried out by Michael, Cinamon and Most (2015) on career-related parental support of adolescents with hearing loss. The result revealed parental influence related to career aspirations of the participants. In this wise parents' interest and participation in career selection process can help young adults with hearing impairment to either select rightly or wrongly. Also, studies by Mau and Bikos (2000), and Shumba and Naong (2012) have found that students and young adults cite parents as an important influence on their choice of career. This further demonstrated the importance of parents figure in all round development of a child. Without parents' guidance, children may commit a lot of fundamental mistakes that may ruin their future.

Also, motivation contributed immensely in whatever anybody becomes in life. The positive correlation of motivation to career aspirations of students with hearing impairment exemplified the efficacy of motivation be it intrinsic and extrinsic

motivation in life's achievement. Without motivation, achievement in any area of life will be very difficult if not unattainable. Motivation whether internal or external is a drive that propel man to make effort which lead to achievement of desire goal. This result corroborated the findings of many studies that reported that motivation is one of the most important factors influencing students' achievement and ensure continuous progression and willingness to confront tasks (Pintrich, 2003; Guay, Chanal, Ratelle, Marsh, Larose & Boivin, 2010; Aluçdibi & Ekici 2012; Alkış, 2015). It must also be born on mind that two dimension of motivation contributed to life achievement. Both intrinsic and extrinsic motivation have been reported to have positive impact on career aspiration as revealed by findings from studies of previous studies (Lepper et al. 2005; Barrett, Patock-Peckham, Hutchinson, & Nagoshi, 2005; Burton et al. 2006; Gillet, Vallerand, & Rosnet, 2009; Hayenga & Corpus 2010)

The non-significant negative correlation of age and gender to career aspirations of students with hearing impairment indicate a new understanding to factors that can contribute to career aspiration among young adults. In the perspective gender and career aspiration, the recent era has open the eyes and understanding of parents and others that are involved in the nurturing of young adults to the fact that choosing a career does not depend on whether one is male or female. And also, that there is no age reference to choosing career which make it expedient for parents and teachers to start to watch for demonstration of certain attributes that can predict career potentials as early as possible. The findings are not in line with results of some studies who have reported the influence of age on career aspiration of young adults (Robertson, 2014; Bubić & Ivanišević, 2016; Al-Bahrani, Allawati, Shindi & Bakkar, 2020) and influence of gender on career aspiration among adolescents and young adults (Blackhurst & Auger, 2008; Nadeem & Khalid, 2018).

The findings also revealed that all the independent variables (parental interest, motivation, age and gender) did not predict career aspirations of students with hearing impairment in Lagos State, Nigeria.

Nevertheless, there was positive relationship of some independent variables to career aspiration of students with hearing impairment. The positive relationship of some of the independent variables point to the fact that career aspirations of individuals may be influenced by different factors owing to individual differences and background. The result from the sample of this study corroborated the studies by Burton et al. (2006) and Lepper et al. (2005) who reported that both extrinsic and intrinsic motivation influence career aspiration of young adults. Also, Massey, Gebhardt, and Garfenski (2008) in his reviewed of 94 studies on career aspiration of young adults; found that high parental expectations for their children were associated with high career aspirations. The findings from different studies give credence to the antecedent of motivation and parental influence on career aspiration of students with hearing impairment.

The study further revealed that Parental interest contributed mostly to career aspirations of students with hearing impairment in Lagos State. This result demonstrated that parents play significant roles in what become of individual in future. This finding supports the fact that parents' play significant role in the total development of individuals. This finding is in line with the studies by Mau and Bikos (2000), and Shumba and Naong (2012) who reported that many of their participants stated their parents are influential factors in the choice of their careers. Also, the findings corroborated the report of the study by Michael, Cinamon and Most (2015) who reported that parents play active role in career development of their children. Hence, it is of utmost importance to note that parents are key figure in determining success and failure of their children in life.

## Conclusion

This study investigated the influence of parental interest, motivation, age and gender on career aspiration of students with hearing impairment in Lagos State, Nigeria using Students' occupational guiding inventory to measure the predictive strengths of independent variables on dependent variable. The outcome of the study revealed that

parental interest and motivation related positively (but not statistically significant) to career aspirations of students with hearing impairment, however, gender and age negatively predict career aspiration of the participants. The negative prediction also was not statistically significant and so could not be generalized. The study further found that the independent variables did not jointly predict career aspirations of students with hearing impairment and that parental interest contributed mostly to career aspiration of students with hearing impairment in Lagos State.

## Recommendation

It is recommended that parents should be encouraged to guide their children towards choosing a career that will be beneficial and relate to their children's potentials. They should not play dictatorial role during the process that their children with hearing impairment are choosing their own careers. Also, since motivation play key role in life aspiration, children with hearing impairment should be guided towards activating both their intrinsic and extrinsic motivational constructs.

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